DAILY METAL REPORTER
MONTHLY SUPPLEMENT

# METALS

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*In This Issue*

**CURRENT OUTPUT OF COPPER, LEAD AND ZINC IN EXCESS OF DEMAND**

By SIMON D. STRAUSS
Vice President, American Smelting & Refining Co.

**1956 TOTAL ALUMINUM SUPPLY SEEN GREATEST IN HISTORY**

By LAWRENCE LITCHFIELD, JR.
Vice President, Aluminum Company of America

**BRITISH METAL MARKETS**

By L. H. TARRING
London, England

**DOMESTIC METAL MARKET REVIEW**
**U. S. METAL IMPORT DUTIES**
**WASHINGTON REPORT**
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## TABLE OF CONTENTS

Washington Report ..... 5

Current Copper, Lead, Zinc Output Tops Demand ..... 7
*By SIMON D. STRAUSS, Vice President*
*American Smelting & Refining Co.*

Total Aluminum Supply in '56 Largest in History ..... 9
*By LAWRENCE LITCHFIELD, JR., Vice President*
*Aluminum Company of America*

British Metal Market ..... 12
*By L. H. TARRING*
*London, England*

U. S. Metal Import Duties ..... 14

Domestic Metal Market Review ..... 15

Metal Statistics ..... 20

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# TWO LINE *Editorials*

*The Republicans declare that they stand for peace, prosperity and lower taxes. It is not expected, however, that the Democrats will meet this challenge by declaring for war, depression and higher taxes.*

* * *

*Mr. Truman has stated that he is willing to support the Stevenson ticket — and there doesn't seem to be anything Adlai can do to prevent it.*

* * *

*It will be interesting to see if the Republicans can think of anything worse to say about Mr. Stevenson than was said about him by some of his fellow-Democrats before he was nominated.*

* * *

*The recent unsuccessful effort to record the heart-beats of a whale serves to emphasize the fact that we seem to have got along for a long time without this information.*

* * *

*Those Democrats in Congress who suggested putting the Republican party's symbol on a new postage stamp probably wanted to get their opponents in a place where they could be sure to lick them.*

* * *

*Ohio State University scientists report radio signals from Venus, 27 million miles away. Maybe they have heard some of our radio programs on Venus and want to file a protest.*

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# Washington Report

October 5, 1956

THE improved copper supply situation was reflected in two Government actions during the month in review. The Office of Defense Mobilization closed the copper supply expansion goal on September 24 while the Commerce Department removed restrictions on the amount of refined copper that can be exported in the fourth quarter of this year.

The copper goal, established in February, 1952, called for an annual supply of 2,270,000 tons of the metal to be available to meet demand of a mobilization period. ODM's action followed a recommendation by the Department of the Interior, which pointed out that the target figure for annual supply of copper has now been exceeded. The 2,270,000-ton figure is based on supplies available from domestic production, old scrap and imports. ODM, on September 24, issued Supplement 11 to Defense Mobilization Order VII-6 to close the goal.

A day later, Commerce announced removal of restrictions on the quantity of refined copper that can be shipped abroad in the fourth quarter and said the action was taken because of the increased domestic supply. Exports, however, will be limited to the export quotas on certain copper raw Free World. Commerce also eased materials in the fourth quarter.

The quota for new and old copper scrap was set at 6,000 short tons, as against 4,000 tons in the third quarter. The limit on new and old copper-base alloy scrap, except copper-nickel alloy scrap containing 5 per cent or more nickel, was set at 21,400 tons, up from 15,400 tons in the previous quarter. Copper-base alloy ingots and other crude forms remained the same for the fourth quarter at 1,000 tons. As in the third quarter, copper-nickel alloy scrap containing 40 per cent or more copper and 5 per cent more nickel generally will not be approved for export. All other copper raw materials, including offshore copper scrap, remain under open-end lisencing.

### Aluminum Quotas Unchanged

Commerce also, on September 28, set export quotas for the fourth quarter of aluminum scrap at 4,000 short tons, the same as in the third quarter. The agency said primary and secondary aluminum metal and alloys in crude form continue under open-end licensing.

Applications to export primary and secondary aluminum metal and alloys in crude form must show the metal is on hand or available. Also, applications to export leaded aluminum foil scrap will not be charged against the fourth quarter quota if the foil is commercially unsalable in this country. Scrap containing 70 per cent or less aluminum will be charged against the fourth quarter export quota only on the basis of the net weight of the aluminum alloy.

### Kaiser Buys GSA Plant

Aluminum made news in another development when the Kaiser Aluminum & Chemical Corp. announced on September 25 it had purchased from the General Services Administration for $2,900,000 cash, the Erie, Pa., aluminum forging plant which it has been operating under lease from the Government since October, 1954.

The Erie facility was put into operation during World War II to produce aircraft parts. After a period of idleness, it was reopened in 1951 when the defense program was accelerated following the Korean outbreak.

### Mineral Search Contracts

Fifteen new contracts for minerals exploration were executed by the Defense Minerals Exploration Administration during August, the Interior Department disclosed. Total estimated costs of the work to be performed under the 15 contracts is $1,880,641, with the Government's participation not to exceed $1,195,986. The contracts are with operators in 10 States and cover search projects for seven different minerals.

In addition, 15 other contracts have been approved by DMEA but not yet executed by the applicants. The total cost of work under these contracts is estimated at $539,984, with maximum Government participation of $388,527.

### Ask Higher Lead, Zinc Duties

The General Services Administration made its regular monthly request for tenders to supply domestically-produced lead and zinc to the Government's long-term stockpile. Tenders were submitted by producers on September 25, with deliveries to be completed by November 15.

But the real news concerning these two metals came from the West Coast. The American Mining Congress, meeting at Los Angeles, on October 4 adopted a resolution endorsing the recommendation of the Tariff Commission to the President on the industry's application for increased duties on lead an zinc. The AMC resolution said that while the President's alternative stockpiling program has certain desirable features, it is at best a stopgap solution and does not offer any real long-range cure to the problem of the industry.

The AMC favored enactment of excise taxes or flexible tariffs on imports of both metals, which may be suspended in whole or in part whenever prices are at an economic level. The mining group warned, however, that the use of direct subisides will lead to eventual Government control of industry. AMC also asked Congress to reject participation in any organization which places the power to regulate trade in the hands of any international body. Earlier the group approved another resolution urging that the Government "establish a broad policy designed to provide adequate protection to domestic mineral producers."

### Tungsten Duty Hike Asked

Also meeting at Los Angeles, The Tungsten Institute on October 3 was told by its president, W. Lunsford Long, that the domestic mining industry is capable of supplying the nation's domestic peacetime tungsten needs. Mr. Long contended that "either an adequate protective tariff should be provided," or the importation of tungsten be restricted to that purchased by the Government.

### Fast Tax Writeoffs

If the steel expansion goal is broadened it may affect other industries. Metal quarters were interested in Washington developments concerning the Government's decision on giving tax help on $1,500,000,000 worth of expansion planned by the steel industry. Defense Mobilizer Arthur S. Flemming said he could make no decision on awarding steel companies permits for fast amortization for tax purposes "until the Department of Defense provides the Office of Defense Mobilization with the new mobilization requirement on which they are working."

The ODM Chief said these new military requirement estimates are not expected from the Defense Department until about the last of this year or the first of 1957.

### BDSA Scrap Survey

The survey which is gathering data of the availability of scrap iron in this country will also collect information and statistics of the availability of copper and aluminum scrap, according to H. B. McCoy, Administrator of the Business and Defense Services Administration. He told members of the National Association of Waste Material Dealers, at a meeting in Baltimore on September 25, that some 5,000 respondents in the metalworking industry were being asked to give pertinent data on consumption and generation of scrap. The Battelle Institute is conducting the survey for the Commerce Department.

Commerce's Bureau of Census, on September 25, reported that at the

(Continued on page 19)

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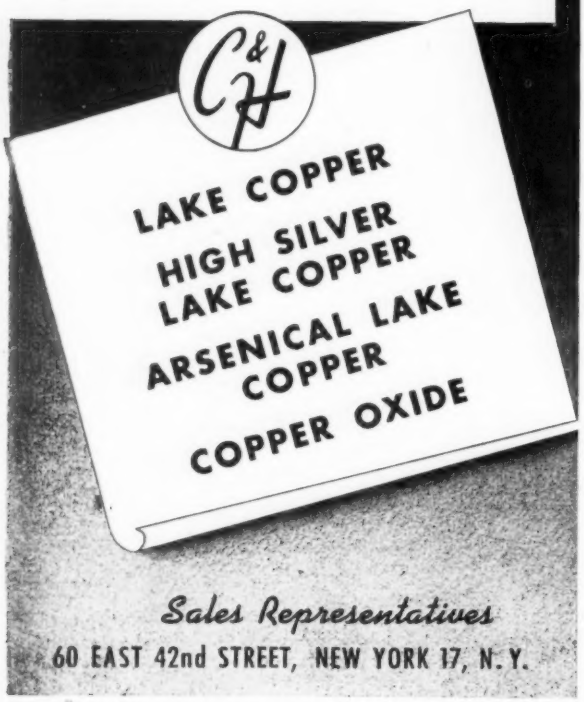


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# MINING INDUSTRY PROSPERING BUT CURRENT OUTPUT OF COPPER, LEAD AND ZINC IN EXCESS OF DEMAND

## Continuation of Present Prices Depends Either on Improvement in Consumer Requirements or on Some Form of Government Intervention

By SIMON D. STRAUSS, Vice President, American Smelting & Refining Co.

WITH three quarters of the year behind us it now appears that 1956 mine production of copper, lead, and zinc in the United States will exceed the production of 1955. The average prices received by miners for these metals will be higher than those received in 1955. Although costs have risen and are continuing to rise, profits of the mining industry on the whole will be greater than they were last year. Of course, what is true of the whole industry is not necessarily true of all its components; if there are some of you for whom the comparison between 1956 and 1955 will be unfavorable, the fact that others are prospering will be small comfort.

The improvement in the industry's earnings should not be cause for unrestrained rejoicing. The fact is that shipments to consumers have made a less favorable showing than production, stocks of unsold copper and zinc in producers hands will be substantially greater at the end of 1956 than at the end of 1955; stocks of lead will show relatively little change. Had it not been for Government support through stockpile buying, however, stocks of lead would also have increased and the rise in zinc stocks might have been of disastrous proportions.

Because the factors affecting each metal are different, it is adviseable to consider the basic position of each separately.

### Strike Threat Eliminated

Last year the copper market attracted wide public attention. Shortages induced by strikes in the mining industry and keen demand by consumers pushed up the price from 30c a pound to above 44c (these are the E. & M. J. monthly averages). The rise continued in early 1956. In February the large domestic producers established a price of 46c a pound while outside sellers at times realized better than 50c. But the inexorable law of supply and demand caught up with the copper producers in the second quarter. Mine production showed substantial gains; demand began to falter. Weakness came

*SIMON D. STRAUSS*

first in the speculative markets, but when new three-year labor contracts with the Mine, Mill Union were agreed on in June, buyers concluded that there would be no major strikes in the United States this year and the large producers reduced their price — to 40c a pound. This level still prevails and many are excepting it to continue for the balance of the year, even though the custom smelters are currently selling at a discount of one cent a pound in order to balance their sales with their intake.

### 1956 Average Price

Assuming no great change in the present price for the rest of the year, the average price for 1956 will be close to 42c a pound as against 37.50c a pound in 1955 — a handsome increase. Domestic mine production is estimated at 1,165,000 tons, 12 per cent more than in 1955 and 6 per cent more than in 1943, the previous peak year for U. S. copper mines. Furthermore, new capacity is being added, notably in Arizona and Montana. This indicates still further increases in 1957 and in subsequent years if demand conditions are favorable.

Shipments by copper refineries to consumers in the United States also will show gains in 1956 over 1955 — perhaps by about 5 per cent. One should point out, however, that last year there were unsatisfied buyers; more copper would have been sold and shipped had it been available. This year buyers of copper have had no difficulty in securing metal. Thus although shipments are likely to be 5 per cent higher this year than last, the real increase in the demand for copper is a smaller amount.

In the first eight months of 1956, world stocks of refined copper at refineries increased by 93,000 tons or over 40 per cent; unless there is some unexpected interruption in production they will probably continue to rise for several months.

Copper consumers still claim that the price relationship of copper to other materials is disadvantageous to copper — even though copper prices have receded from their peak. They continue to give publicity to plans for substitutions which they intend to make either because of price or because they feel that the constant availability of copper is open to question. Shortages such as were experienced last year leave a bitter taste in certain quarters.

Among some copper producers there is a disposition to feel that this talk is exaggerated; that although some uses may be lost other new ones are developing; that the increase in population and in national prosperity make for the propability of a further rise in the use of copper.

### Production Incentive

Granting that this is so, at the same time one cannot rail to be impressed with the strong incentive which a 40 per cent copper price provides for bringing new mines into production. Foreign mine production this year appears likely to be about 6 per cent greater than the 1955 output. This is less of an increase than has occurred within the United States but is still substantial. Furthermore, discovery of new copper deposits is being regularly reported and plans are being made to bring them into production. Time does not permit their enumeration but reports come in from every quarter — Canada, Mexico, Peru, Chile, Brazil, Northern Rhodesia, Cuba, Belgian Congo, French Equatorial Africa, and even Ireland. The longer the price remains in its present range the greater the incentive to find and produce additional copper.

A fair guess would be that for the next five years at least, potential copper producing capacity will increase by from 5 to 10 per cent annually. Estimating the growth of demand is more difficult. It would be an unprecedented coincidence if production and consumption showed uniform gains

Address delivered at Metal Mining and Industrial Minerals Convention and Exposition of American Mining Congress, Los Angeles, Calif., October 4, 1956.

simultaneously. It certainly has not happened that way in the past. In 1955 demand outstripped supply; in 1956 supply is outstripping demand.

Over the last decade the use of copper outside the iron Curtain areas has increased on an average of about 5 per cent annually, but it should be remembered that during this decade two conditions existed which may not exist in the years ahead, in Europe there was the major job of rebuilding and re-equipping industry after the ravages of World War II; in the United States a vacuum of post-war scarcities in transportation, housing, and consumers' durable goods had to be filled. The rising population of the world and the desire of that popuiation for higher living standards create the potential for much greater use of copper and, indeed, of all metals. Consumption will undoubtedly continue to expand. But will it expand as rapidly as supply in the face of a 40c price? That is the puzzle facing the copper industry.

Other factors than the supply-demand relationship will have an important bearing on future price trends in copper. The labor situation in this country appears to offer prospects of greater tranquility than in the recent past, but an explosive situation between the white and black workers continues to exist in Northern Rhodesia. Chile is making a valiant effort to control inflation; if successful, rising prices there might again create labor unrest.

Also most important is the position our own Government will take in the event of a further sharp break in copper prices. In relation to wartime needs the copper stockpile is relatively much smaller than the lead or zinc stockpiles. Quite possibly the Administration in Washington might decide to insure maintenance of domestic copper production with a program similar to that which has been in operation in lead and zinc since 1954. If it does decide to make new purchases, in what volumes will such purchases be made and at what price levels? These are questions in the realm of guesswork to which no one can make a certain answer.

### Lead, Zinc More Stable

By contrast with copper, the lead and zinc producers feel like Cinderella. Current lead and zinc prices, in relation to costs or to previous levels, are less profitable than are copper prices, but by the same token they are more stable. In fact, the domestic producers have seen virtually no change all year — lead has been at 16c and zinc at 13.50c a pound since mid-January. The average prices for 1955 were 15.138c for lead and 12.299c for zinc, so the gains for the year as a whole will be 6 per cent for lead and 10 per cent for zinc if the status quo is maintained to the year-end.

Mine production in this country also has risen, but at a slower rate than for copper. Lead mines apparently will yield about 340,000 short tons this year, — about 2 per cent more than in 1955; and zinc mines are expected to produce 540,000 tons, up 7 per cent from 1955. In both cases, the prices are the highest since 1952 and the production the greatest since 1953.

Lead appears to be the most stable, as it is the heaviest, of the major non-ferrous metals. The changes in production, consumption, and stocks this year as compared with last year are relatively small. Demand has been well sustained from the principal consuming industries — high-test gasoline, replacement storage batteries, and cable sheathing. While lead is losing ground in a few fields, there is substantial growth in others and on balance the outlook is for an unspectacular upward trend in consumption so long as general business activity remains high.

### World Lead Output

On the supply side no major new sources of lead are expected to begin production wtihin the next few years. The new zinc-lead deposists now being developed in Eastern Canada will be zinc producers primarily and will not add greatly to the lead supply. Nevertheless it is a fact that total lead production in the world (outside the Iron Curtain) has been in excess of total lead demand since 1952. The firmness in lead prices and the low level of lead producers' stocks may be attributed to the fact that the United States Government has been buying up the excess supply and putting it into stockpile. From available statistics it appears that during the first eight months of 1956 shipments to stockpile from U. S. refineries averaged about 6,000 tons a month averaged about 6,000 tons a month a month in 1955.

In addition to buying lead from domestic refineries, the Government this year has also begun taking lead refined abroad under the barter program of the U. S. Department of Agriculture. Actual deliveries to date probably have been relatively minor but in the last quarter the quantities are expected to accelerate materially.

The statistical position of zinc this year is by no means impressive, even though the price has held firm at the highest level since 1952 and production has increased. In contrast with the increased deliveries of copper and the well sustained consumption of lead, shipments to consumers by domestic zinc smelters for the full year may be as much as 12 per cent under the record-breaking shipments of 1955.

This slump in demand reflects the sharp cutback in automobile production this year (about 60 pounds of zinc is used per vehicle produced) and the effects of the steel strike in July. A further contributing factor has been ther elatively poor demand for brass (the gains in copper deliveries have for the most part been to the wire industry).

As to supplies, not only has domestic mine production increased but imports of concentrates and metal will probably be at least as great as in 1955, which saw the highest imports on record. Zinc-smelting capacity in this country is being expanded by a number of producers. As zinc mine production is still well below the rates attained during World War II and the Korean War, concentrate imports are certain to continue at a very high rate. They now account for about 75 per cent of the total import volume.

Stocks of zinc in producers' hands rose 63,000 tons in the first eight months of the year despite deliveries to Government stockpile by domestic smelters at an average rate of over 9,000 tons a month in the same period, a rise from the rate of about 7,000 tons monthly that prevailed in 1955. Furthermore, the government has agreed to take very large tonnages of zinc on barter for agricultural products. Part of this metal has been smelted in the United States from foreign ores and the balance is metal smelted abroad. The bulk of the deliveries will be made in the fourth quarter and because some of the shipments will be from domestic smelters, a further rise in reported producers' stocks may be avoided.

Although the price of zinc is not so high as to giver the same incentive for new production as exists in the case of copper, further growth in foreign mine output is in prospect, particularly in Canada where major new discoveries are still being made. Also to be watched with great interest is the new field in Brazil on which the U. S. Geological Survey recently released a report. Preliminary data indicate the deposit is of extremely high grade, but as the find is a new one actual production is not likely to be of major significance for several years.

On the demand side, the future picture is by no means bleak. The automobile industry, having corrected its excessive inventories, is looking forward to a sharp rise in output in 1957 and this will mean much to zinc producers. Recent advances in the price of aluminum tend to strengthen the basic position of zinc in the die-casting field, so much so that a preliminary estimate has been made by the Die Casters' Association of a 20 per cent rise in the use of zinc for this purpose next year to a new record level of 420,000 tons. The steel industry, furthermore, is continuing to expend its capacity for galvanizing with new continuous lines, each of which costs $4,500,000. This is a reassuring evidence of faith in zinc's future. Outside the United States the outlook is likewise encouraging. The fact that zinc today is the cheapest non-ferrous metal is bound to mean that it will receive every consideration in the industrialization of the so-called underdeveloped areas.

### Gov't Stockpiling

Nevertheless, in all candor one must admit that the immediate price future of the zinc market, and to a lesser extent the lead market, will be profoundly affected by United States Government policy on stockpiling.

When the decision to resume stockpiling was made in March, 1954, lead was selling at 12.50c a pound and zinc at 9.25c. Today's prices are 3.50c and 4.25c higher (respectively), than they were then and the greatest part of this rise must be attributed to the large tonnages taken off the market by United States Government buying, during the last two years. It will be recalled that President Eisenhower announced in August, 1954, that there would be no increase in import duties on lead and zinc but that under an expanded buying program the Gov-

(Continued on page 19)

# ALUMINUM SUPPLY IN '56 PUT AT 2,345,000 TONS, 8% MORE THAN LAST YEAR AND LARGEST IN HISTORY

## New Facilities to Increase U. S. Capacity to Over 2,500,000 Tons in Next Two Years; Industry Optimistic Upward Trend in Use of Metal to Continue

By LAWRENCE LITCHFIELD, Jr., Vice President, Aluminum Company of America

IT appears that 1956 will be another banner year for the American aluminum industry. The total supply of metal available has been the greatest in history, and shipments of aluminum products to consumers are likewise expected to set a new record.

Primary aluminum production in 1956 will surpass last year's record output by at least 100,000 tons. In 1955 domestic producers turned out 1,565,721 tons of aluminum; this year's output is expected to reach 1,675,000 tons, an increase of 7 per cent. Production during the first half of the year was actually 13 per cent higher than in the same period last year, but output during the last half has been curtailed because of strikes at eight smelting plants in August. Four smelting plants of Aluminum Company of America were shut down for nine days, and four smelters of Reynolds Metals Company were on strike for 25 days. An estimated 70,000 tons of aluminum were lost as a result of these strikes.

Imports of primary aluminum during 1956 are expected to total approximately 250,000 tons, about 26 per cent higher than last year's 198,000 tons. As in the past, the bulk of these imports will come from Canada.

According to preliminary estimates by the Department of Commerce, recovery of secondary aluminum from all forms of scrap — new, old and imported — will total this year approximately 420,000 tons, up about 3½ per cent over the quantity estimated to have been recovered in 1955.

The aggregate supply expected to result from this record primary production, larger imports, and greater recovery of seconday metal, is 2,345,000 tons of aluminum, an increase of 8 per cent above total supply last year.

Currently the Office of Defense Mobilization is not calling on primary producers to make deliveries of any aluminum to the Government strategic stockpile. Last year a substantial quantity of aluminum was taken for the stockpile.

Demand for aluminum, exceptionally strong during the first quarter, began to decline in the second quarter and a gradual, mild decline continued during the summer months and into the third quarter. Demand has started to pick up again and is expected to increase still more during the fourth quarter. Actual shipments of aluminum products to consumers during the first half of the year were 11½ per cent higher than those during the same period of 1955. Total shipments during 1956 are expected to be roughly 5 per cent above last year's all-time high of two million tons.

Of the estimated shipments of aluminum products during 1956, approximately 9½ per cent will be for direct military applications. During the third quarter, producers were required to set aside more than 71,000 tons of aluminum for defense and atomic energy programs. In the fourth quarter, the set-aside will total 73,000 tons.

In August, following the granting of substantial wage increases and other employment benefits to hourly-paid employees in connection with the signing of three-year, no-strike working agreements, the primary producers raised the price of aluminum pig one cent per pound to its current 25 cents.

### Secondary Aluminum Prices

Prices of secondary aluminum, considerably higher than the price of primary during the tight supply period of 1955 and early 1956, declined in the second quarter and secondary ingot was selling for less than primary during June and the first half of July. Scrap prices increased and the price of secondary metal once again climbed above primary as the strikes progressed at producers' plants in August. With the supply picturue improving rapidly, the normal price relationship that prevailed in June and early July between primary and secondary is expected to return in the fourth quarter barring a surge in demand beyond expectations.

In an effort to improve scrap supply, the aluminum producers and secondary smelters urged the Business and Defense Services Administration to ban or at least sharply curtail exports of scrap during the fourth quarter, out last week it was announced that the fourth quarter export quota has been set at 4,000 tons, the same as in the third quarter. Secondary smelters believe that the demand for foundry products and for aluminum generally will climb during the fourth quarter as the automotive companies begin producing their 1957 models. Both the producers and secondary smelters have also urged BDSA to eliminate stockpiling of aluminum during the first half of 1957 because of the anticipated heavy demand for aluminum products.

The market distribution pattern for aluminum during 1956 has been similar to that of 1955. The acceptance of aluminum in the building construction field keeps increasing. Aluminum curtain walls (exterior sheathing) for multi-story buildings have been a growing application during 1956, as have aluminum windows and clapboard siding. Substantial progress has been made this year in the highway field. Aluminum railings and highway signs are now the standard in over half the states, and well over a hundred thousand aluminum street lighting standards are now in use. Such applications are expected to account for substantial tonnage in the coming Federal interstate highway building program.

Another large, growing market for aluminum is the transportation field, especially automobiles. Consumption of aluminum per car has been gaining steadily. In fact, on a tonnage basis, the increase in aluminum consumption per car in 1956 compared to 1955 has more than offset the decline in number of cars produced. New 1956 models will use considerably more aluminum for a growing number of exterior trim applications. Significant progress was made in the railroad industry this year with the unveiling of several all-aluminum, low-slung passenger trains which weigh and cost only a third as much as conventional equipment. It was also a year in which the popularity of aluminum small boats became firmly entrenched among sports-loving Americans.

In the electrical field, aluminum continues to make rapid strides. During 1956 more and more distribution lines along city streets were using covered aluminum wire. Aluminum bus bar found its way into more commercial buildings, and a growing amount of telephone exchange cable was made of aluminum.

Spectacular strides were made by aluminum in the packaging of a wide variety of products. During 1956 aluminum rigid foil containers for packaging TV dinners, frozen fruit pies and a host of other products appeared in large volume on grocers' shelves. The use of aluminum foil in the flexible packaging field for such items as soap wrappers and potato chip bags also increased markedly.

These are, of course, only a few of the applications in which aluminum made significant progress during 1956. Numerous other applications

Address delivered at American Mining Congress Meeting, Los Angeles, Calif., October 4, 1956.

are also demanding growing quantities of aluminum, and many markets offer tremendous potential for further development. The aluminum industry in general is highly optimistic that the upward trend of aluminum consumption will continue.

Proof of the industry's faith in the future is indicated by the expansion in production facilities that has been programmed during 1956. At the beginning of the year, domestic primary aluminum smelting capacity totaled 1,609,200 tons per year. By July 1, annual capacity had reached 1,728,500 tons, and 25,000 tons of new capacity are scheduled to be placed inoperation during the last half of the year. By the end of 1956, U. S. primary aluminum production capacity in 17 plants is expected to reach 1,753,500 tons, almost 2½ times as much as when the Korean War started.

Considerably more expansion is also now underway which will boost the 1956 year-end capacity by 764,500 tons during the next two years. Representing an increase of 43 per cent, the new facilities being constructed, including four new plant locations, will bring the nation's total capacity to more than 2.5 million tons.

### Individual Company Expansion

A brief review of individual company expansion programs is as follows: In April Alcoa announced it would build a 150,000-ton, coal-powered smelter about 18 miles east of Evansville, Indiana, in Warrick County, on the Indiana side of the Ohio River. Initial production is scheduled for the fall of 1957. Late in August Alcoa announced that a seventh potline with a capacity of 20,000 tons would be added to its Point Comfort plant. January, 1958, is the target date for production from the new line.

Early in January Reynolds announced a 100,000-ton capacity addition to its Listerhill, Alabama, plant. Supplied by power from TVA, the new facilities are expected to begin producing aluminum in the fall of 1957, at which time Reynolds will begin supplying metal in molten form to an adjacent foundry being built by the Ford Motor Company. Over the next ten years, Reynolds will deliver to Ford an amount of aluminum expected to be in excess of 320,000 tons under an agreement called "the largest industrial aluminum order in the history of the aluminum industry."

Last December Kaiser Aluminum & Chemical Corporation announced it would construct a new coal-powered smelter in the Ohio River Valley at Ravenswood, West Virginia. Scheduled to be in operation by mid-1957, the plant will have an initial annual capacity of 125,000 tons of aluminum and is designed so that it can be expanded to 220,000 tons. In April Kaiser announced it would add a ninth potline with a capacity of 27,500 tons to its gas-powered smelter at Chalmette, Louisiana. This new capacity is expected to be in operation by the summer of next year.

A forthcoming new producer is Harvey Aluminum Company, a subsidiary of Harvey Machine Company of Torrance, California; Harvey has under construction a 67,000-ton capacity smelting plant at The Dallas, Oregon. Armed with a contract for power from Bonneville Power Administration and a supply contract with the government, Harvey plans to begin aluminum production by late next year.

Another new producer in the future will be the Olin Revere Metals Corporation, a new firm jointly owned by Olin Mathieson Chemical Corporation and Revere Copper & Brass, Inc. Last January Olin Mathieson had announced it would build a 60,000-ton capacity, coal-powered aluminum smelter on the Ohio River near Clarington, Ohio. Then, late in August, it was revealed that Olin Revere had been formed to enter the primary aluminum business with the plant at Clarington being tripled in size to 180,000 tons of aluminum per year. Olin Revere will supply Olin Mathieson with 120,000 tons annually and Revere Copper with 60,000 tons. The Clarington plant is expected to be operating at capacity late in 1958, with some production before then.

The tremendous expansion currently in progress is causing a radical change in the economic geography of the industry. In years past, smelters were located near cheap sources of power — principally hydroelectric — which meant that the metal was produced far from its markets. The scarcity of good water power sites after World War II caused the industry to turn to gas as a source of electric energy. Of all the expansion authorized by the government following the outbreak of the Korean War, 58½ per cent of the new smelting capacity was based on water power, with 29 per cent on gas and 12½ per cent on lignite. As natural gas rose in price it became less attractive as a source of power. This development, plus the fact that freight rates have risen faster than power costs, led the industry to turn to steam power from coal.

### Ohio River Valley Plants

Three plants are now being built in the Ohio River Valley as producers believe that the savings in transportation which result from having the metal produced nearer its markets, will more than offset the higher costs of coal power. In fact, 72 per cent of the new smelting capacity now being constructed will be powered by coal, with water accounting for 22 per cent and gas 6 per cent.

While domestic expansion proceeds at a rapid pace, our neighbors to the north are also in high gear. At the beginning of the year, the installed primary aluminum smelting capacity of the Aluminum Company of Canada, operating subsidiary of Aluminum Limited, was 650,000 tons per year. Thus far during 1956 Alcan has added 22,000 tons of capacity at its Isle Maligne, Quebec, plant and 60,000 tons at its Kitimat, British Columbia, smelter. Another 30,000 tons of new capacity is scheduled to begin operation at Kitimat in December, bringing total Canadian smelting capacity to 762,000 tons by the end of 1956. Actual Canadian production for the year will be considerably lower because of a severe water shortage in the Saguenay area of Quebec which began late in 1955 and continued into the spring of this year. Canadian production of aluminum during 1956 will be in the neighborhood of 600,000 tons, compared to 1955 output of 607,700 tons.

Alcan has announced a definite schedule for further expansion of its Kitimat plant. A total of 150,000 tons are planned, with 30,000 scheduled for next year, and 60,000 each in 1958 and 1959. In addition, Alcan announced in April that it proposes to construct a large hydroelectric project on the Peribonka River in Northern Quebec which would support a new 120,000-ton smelter in the Saguenay area.

### New Canadian Producer

A new Canadian aluminum producer is also in the offing. The Canadian British Aluminum Company, jointly owned by the British Aluminum Company, Ltd. and the Quebec North Shore Paper Company, has begun construction of a new 160,000-ton capacity smelter at Baie Comeau, Quebec. The plant is to be constructed in four equal stages, with 40,000 tons scheduled by the end of 1957, another 40,000 by the end of 1959 and the balance by 1965.

It is doubtful that much of the production from the Baie Comeau smelter will enter the United States, but a substantial portion of Alcan's increasing output is earmarked for the growing American market. Effective July 1, the U. S. tariff on basic aluminum was reduced from 1.5 to 1.4c per pound. On July 1, 1957, the tariff will drop to 1.3c and the following year to 1.25c per pound. The duty on aluminum semi-fabricated shapes, such as sheets and bars, was lowered from 3 to 2.8c per pound effective July 1, 1956, with subsequent reductions in succeeding years to 2.7 and 2.5c per pound. As a result of this action, the United States will become a more inviting, lucrative market for foreign metal.

The foregoing rapid growth of the aluminum industry has necessarily required a substantial expansion of bauxite mining and alumina production. While mining activity in Arkansas continues at a fairly even level, a growing proportion of the bauxite consumed in this country is accounted for by imports. Last year 74.2 per cent of the total U. S. new supply of bauxite for consumption was imported. The latest figures available show that during the first half of 1956 imported bauxite represented 76.2 per cent of the total new supply.

Bauxite imports are steadily increasing, and in 1956 should surpass the record year of 1954, when 5,283,888 long tons of ore entered the United States. Imports during the first half totaled 2,944,615 long tons, a new six-month high. Jamaica, which first shipped ore in 1952, supplanted Suriname last year as the largest source of imported bauxite and this trend is continuing. During the first half, 49 per cent of the imported bauxite came from Jamaica, 46 per cent from Suriname and the remainder from British Guiana and French West Africa.

Increasing quantities of bauxite will be supplies by Jamaica in the years

ahead. Kaiser is doubling its mining activity on the island and Reynolds is installing aditional facilities there so that bauxite output canb e oubled when necessary. Aluminum Limited is planning to begin mining in a previously undeveloped sector of its Jamaican properties and has announced it will build a second alumina plant on the island. This new plant, capable of producing 245,000 tons of alumina per year, is expected to begin production by mid-1958. Limited's initial plant, designed to produce 230,000 tons of alumina annually, is now being expanded to a capacity of 550,000 tons by the summer of 1957. These operations in Jamaica supply the alumina requirements for Alcan's Kitimat plant.

Next year two other Caribbean countries — Haiti and Dominican Republic — will become a source of bauxite for the United States. Reynolds is completing installations in Haiti and expects to be in complete operation there early in 1957. Alcoa is constructing facilities for mining in the Dominican Republic and will begin operations there in the last half of 1957.

### Expend Alumina Plants

To process the growing supply of bauxite, domestic producers are expanding existing alumina plants and building new ones. Alcoa is now constructing a new alumina plant adjacent to its smelter at Point Comfort, Texas. The new refinery will produce more than 500,000 tons of alumina annually and is being designed to process both Suriname bauxite and ore from the Dominican Republic. Initial production is scheduled for early 1958, Reynolds is currently enlarging its La Quinta alumina plant near Corpus Christi, Texas, by 50 per cent, increasing annual production capacity from 365,000 tons to 547,500 tons. Kaiser is curently constructing a new alumina plant at Gramercy, Louisiana, with an initial capacity of 430,000 tons per year. Operation of this plant is scheduled to begin by mid-1957. A third new alumina plant will be built by Olin Revere at Burnside, La., near New Orleans. Designed to process bauxite from the Suriname mine of the Billiton Company, this new plant will be able to produce 345,000 tons of alumina per year and is scheduled to begin operating in 1958.

While Olin Revere is building a plant to supply its own alumina requirements, the other newcomer, Harvey, has signed a contract with two Japanese producers calling for the delivery of 105,000 tons per year for a five-year period beginning in mid-1957 but can continue beyond this period at the discretion of the parties. One deterrent to such an arrangement was eliminated on July 17, when the President signed a bill (HR 10269) suspending for two years the import duties on metal-grade alumina. Prior to this the duty on alumina had been ½c per pound. At the same time the President also signed a bill (HR 8228) extending for two years duty-free imports of bauxite.

Despite the greatly accelerated rate of aluminum production, reserves of bauxite in the Western Hemisphere appear to be ample to supply North American requirements for many years in the future. Prospecting is actively being carried on by the aluminum producers and by other and new discoveries are constantly expanding previous estimates of known reserves. Last spring, for example, a report out of Venezuela announced that important new deposits had been discovered in the southern part of that country. More recently, huge deposits are reported to have been discovered on the West Coast of Cape York peninsula on the far Northern ti pof Australia. Announcements such as these lend encouragement that the aluminum industry has no worries regarding future sources of raw material.

### New Magnesium Plant

With regard to magnesium, the most important development during 1956 was the July announcement of the formation of the Alabama Metallurgical Corporation as a second commercial producer of primary magnesium in the United States. Jointly owned by Brooks & Perkins, Inc., and Dominion Magnesium, Ltd., of Toronto, the new producer plans to build a plant at Selma, Alabama, on the Alabama River 50 miles west of Montgomery. The new plant will have a rated annual production capacity for high purity magnesium of 10,000 tons, which is to be made by the ferrosilicon reduction process. This process is based on the use of silicon as a reducing agent, reacted in the form of ferrosilicon with magnesium oxide which is obtained from burnt dolomite rock. The supply of the raw material, dolomite, is virtually unlimited in Alabama.

Of course, mention should also be made here of Nelco Metals, Inc., which has been producing high-purity primary magnesium for a number of years at the Government-owned silicothermic plant in Canaan, Connecticut. The greater part of this production, however, has been earmarked for the Atomic Energy Commission.

Output of primary magnesium during the first six months of 1956 was 37,130 tons, a production rate on an annual basis very close to the industry's present capacity of 75,000 tons. As a result of a month-long strike, which began on July 6 and idled Dow Chemical Company's plant at Freeport, Texas, and the government-owned, Dow-operated plant at nearby Velasco, it appears that total output of magnesium this year will be closer to 70,000 tons. This will represent a substantial increase over last year's production of 61,130 tons.

Although 1956 output is expected to exceed actual consumption, demand for magnesium is steadily increasing and it appears that additional production will be needed to keep pace. Last year saw a record commercial use of magnesium and a new mark is virtually assured for 1956. Shipments of magnesium wrought products will be nearly 50 per cent higher than for any previous year and castings shipments during the first six months were 25 per cent above the same period last year.

### Commercial Use Proving

In addition to its important military applications in the aircraft and missile fields, the commercial use of magnesium as a structural material is growing. Many industries are findings magnesium of increasing importance, including electronics, machine tools, printing and material handling equipment, and the metal is expected to get wider use by the automobile industry.

At the present time, however, nonstructural uses consume more magnesium than do structural applications. A substantial quantity of magnesium was used last year as an

(Continued on page 19)


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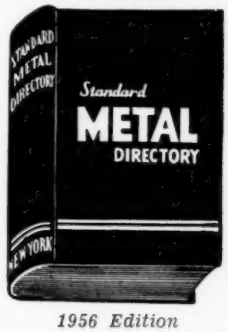


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# FURTHER DECLINE IN U. K. COPPER PRICES BEFORE YEAR-END EXPECTED; PRODUCERS' STOCKS MOUNTING

## Tin Consumers Have No Difficulty in Covering Requirements; Lead, Zinc Dull With Uncertainty Over Future U. S. Stockpiling a Disturbing Factor

By L. H. TARRING
London, England

October 4, 1956

ALTHOUGH the problem of the Suez Canal has not yet been settled, during the past month the political tension over this issue has lessened very considerably, and broadly speaking can be considered to be no longer exercising any appreciable influence on copper prices.

During the same period the African labor trouble on the Rhodesian Copperbelt mines has ended, and for the first time for two or three months production there is proceeding quite normally. Fortunately the threat of serious trouble on the Rhodesian railways through a strike of Africans did not fully materialize and, in the event, the movement of copper from, and fuel to, the Copperbelt plants was not seriously interfered with.

In Britain, the ending of the holiday season has brought little or no improvement in the weight of consumer demand for copper, and indeed, in recent weeks a certain amount of reselling by consumers has actually taken place here. Buying by Continental interests has been very spasmodic and in total on a smaller scale than earlier in the year. In fact, although consumption on the Continent of Europe may not have been very severely affected as yet, the demand for copper and brass products in Europe seems to be below its peak, but the position in this country is aggravated by the rather unsatisfactory position of the motor car industry.

Most European consumers seem to be very well covered as far as their immediate copper needs are concerned. This, taken in conjunction with the rebuilding of fabricators' stocks in the United States in recent months, has not unnaturally tended to give the market an easier trend, with the result that during the past month prices on the London market have dropped by almost £20 a ton, and now stand appreciably below even the custom smelters' quotation in America.

The question is beginning to be asked how much longer the Rhodesian Selection Trust will maintain its fixed price to certain U. K. consumers at £300 a ton, as in the present rather dull trading conditions, it seems pretty certain that its fabricating customers cannot pass on the additional cost of this metal (compared with London Metal Exchange quotations) to buyers of fabricated products.

The impression is growing that although there is little indication of any pressure to sell copper at the present time, producers must be accumulating stocks, and as a result there is still a disposition in a number of directions to look for some further decline in copper quotations before the year is out. This is certainly no new feature in the copper market, but in recent years whenever this view has begun to gain ground, something has cropped up to alter the supply position, and it will be interesting to see whether on this occasion buyers' expectations will be realized.

On the assumption that no major interruptions in supply are in early prospect, it looks as if the world copper supply position is now a fairly satisfactory one, and this obviously seems to be the view of the U. S. Government since it has decided to cease encouraging further expansion of domestic production for strategic reasons, and has relaxed the export restrictions on raw copper and copper scrap.

Nothing has been head on this side at this writing of the Government's intentions regarding the disposal of the 36,000 tons of copper from the stockpile, that was originally expected to be offered from the middle of August onwards. Whether the shadow of the Suez trouble is holding up the disposal of this metal is hard to say, but unless consumer demand for copper improves in the near future, the sudden appearance of another 6,000 tons a month or so of Government metal might have quite an important impact on the market.

### Tin Moderately Higher

Tin prices have moved fairly widely here during the past month, but on balance are only moderately higher than they were at the end of August. Prices actually responded to a 15 per cent increase on freights on ports East of Suez, and the withdrawal of most of the European pilots from the Suez Canal caused a flurry of buying, on fears that the passage of ships through the Canal might be seriously delayed.

This temporarily pushed prices up to £810 a ton, but when these fears were proved to be unwarranted, at any rate in the short term, prices quickly receded again, as most consumers are pretty well covered for the time being, having rushed in to protect their positions at an earlier stage of the Suez dispute.

Nevertheless, nothing has occurred to change the basic expectation that the world statistical position of tin

### 36,000 TONS COPPER TO BE SOLD BY U. K. BY MAR. 31

The British Supply Ministry met with representatives of U. K. copper consumers and the London Metal Exchange on October 10 concerning plans which provide for disposal of 36,000 tons of electrolytic copper from the U. K. Government stockpile by March 31.

Half of that total is for sale for delivery and price fixation between November, 1956 and March, 1957, with the remaining 18,000 tons to be offered to Rhodesian producers on a competitive price basis. The tenders will be made on October 17, returnable on October 25, and results made public October 30. Under the Ministry's plan about 3,000 tons a month will be offered for sale for November through March delivery.

### U. K. COPPER STATISTICS

Figures received from the British Bureau of Non-Ferrous Metal Statistics show a fairly large decrease in stocks at the end of July at 51,975 tons (of which 32,444 tons at consumers and 5,778 tons in L. M. E. approved warehouses) as against the 55,815 tons in stock at the end of June. Imports into the U. K. during July totaled 24,561 tons, of which 10,505 tons were from Northern Rhodesia.

Production was 10,913 tons of primary and 7,682 tons of secondary, and during July consumption — full details of which are given below — totaled 51,068 tons.

| | July 1956 | Jan.-July 1955 | Jan.-July 1956 |
|---|---|---|---|
| UNALLOYED COPPER PRODUCTS | | | |
| Wire (1) ..... | 20,391 | 130,817 | 141,230 |
| Rods, Bars and Sections ..... | 1,799 | 10,850 | 12,205 |
| Sheet, Strip and Plate ..... | 4,488 | 36,974 | 34,408 |
| Tubes ..... | 4,424 | 28,586 | 31,150 |
| Castings and Miscellaneous. | 650 | 3,500 | 4,550 |
| ALLOYED COPPER PRODUCTS | | | |
| Wire ..... | 1,299 | 10,835 | 10,934 |
| Rods, Bars and Sections ..... | 8,791 | 89,347 | 77,425 |
| Sheet, Strip and Plate ..... | 8,825 | 80,541 | 72,505 |
| Tubse ..... | 1,898 | 13,023 | 13,515 |
| Castings and Miscellaneous. | 5,904 | 40,646 | 45,350 |
| Copper Sulphate | 3,924 | 24,178 | 30,403 |
| TOTAL ALL PRODUCTS . | 62,393 | 469,297 | 473,675 |
| Copper Content of Output ... | 51,068 | 374,981 | 380,983 |
| Consumption of refined copper (2) ..... | 39,149 | 276,824 | 291,459 |
| Consumption of copper and alloy scrap (3) (copper content) . | 11,919 | 98,157 | 89,524 |

Note: (1) Consumption of H. C. copper and cadmium copper wire rods for wire and production of wire rods for export.

(2) Virgin and secondary refined copper.

(3) Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

# AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

**(Per Long Ton)**

**Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange**

| | COPPER | | | TIN | | | LEAD | | ZINC | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cash | 3 Months | Settlement | Cash | 3 Months | Settlement | Current Month | 3rd Following | Current Month | 3rd Following |
| | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. | £ s. d. |
| **1954 Averages** .. | 248 17 11 | 239 17 7 | 249 0 11 | 719 8 11 | 709 17 7 | 720 6 7 | 98 8 12 | 94 7 4 | 78 5 4 | 77 16 11 |
| **1955 Averages** .. | 351 14 11 | 341 0 3 | 352 5 6 | 740 2 12 | 736 12 11 | 740 12 8 | 105 17 3 | 105 9 6 | 90 13 4 | 89 12 3 |
| **1956** | | | | | | | | | | |
| January ..... | 392 4 7 | 378 13 10 | 392 14 1 | 814 4 4 | 788 13 2 | 815 0 11 | 118 11 4 | 116 10 0 | 100 16 9 | 97 13 2 |
| February ..... | 403 15 11 | 389 2 10 | 404 3 10 | 805 10 6 | 774 0 11 | 807 3 4 | 119 7 6 | 115 8 5 | 100 8 1 | 96 7 6 |
| March ..... | 419 11 8 | 410 7 7 | 420 0 6 | 805 10 9 | 780 9 6 | 807 8 7 | 121 2 6 | 118 13 11 | 101 11 2 | 98 13 11 |
| April ..... | 374 12 9 | 369 0 6 | 375 0 6 | 764 5 6 | 759 17 0 | 764 17 6 | 115 14 3 | 114 18 9 | 98 4 10 | 96 16 2 |
| May ..... | 332 15 5 | 326 9 4 | 333 2 9 | 748 10 3 | 747 15 3 | 749 1 10 | 111 10 11 | 109 16 11 | 94 16 4 | 92 17 7 |
| June ..... | 296 17 2 | 298 6 2 | 297 4 9 | 742 3 10 | 736 19 1 | 742 15 3 | 113 4 6 | 111 1 5 | 94 0 1 | 92 7 9 |
| July ..... | 284 15 3 | 284 2 1 | 285 2 9 | 749 18 2 | 746 0 8 | 750 10 5 | 113 13 2 | 112 0 10 | 93 9 8 | 92 6 10 |
| August ..... | 304 7 11 | 303 19 4 | 304 14 1 | 769 7 11 | 766 7 6 | 770 0 0 | 116 1 3 | 114 9 9 | 95 11 11 | 94 0 4 |
| September ..... | 302 13 9 | 301 16 3 | 303 0 6 | 788 18 6 | 780 9 3 | 789 11 0 | 117 3 6 | 115 2 11 | 96 6 11 | 94 5 9 |

will remain fairly tight for the rest of this year, and it is noteworthy that although on the London market there has been a reasonable amount of selling on behalf of the smelters here, the backwardation has persisted at over £10 a ton.

At the same time, it must be recorded that consumers as yet do not appear to be experiencing any difficulty in covering their immediate requirements.

After a long period of high activity, the European tinplate trade looks a little less active and more competitive than it has been for sometime, but it is doubtful whether or not there will be any serious falling away in tin consumption on this account. Although new business in tinplate is quieter, order books are still quite good on this side of the Atlantic, and in America the mills seem to be very well placed for the time being.

### Lead Market Colorless

The lead market was also affected by the fears of a slowing down in the movement of ships through the Suez Canal when European pilots left, but apart from this it has been rather colorless on the whole.

Reports from America that the U. S. Government stockpile objective for lead looks like it may be realized before the end of this year naturally aroused some interest here, as for a long time it has been fairly plain that without this valuable support the international lead price situation might well have been easier than has actually been the case.

Lead consumption in this country is keeping up fairly well on the whole, although it is certainly rather quiet at present than it was earlier in the year. Even cable makers seem to be slowing down a little after a period of considerable activity on lead-sheathed cables.

While new buying has not been particularly impressive, there does not seem to be any serious surplus of offerings on the open market, and at one time about a couple weeks ago, it looked as if European users were putting up the price to attract foreign metal away from the United States in order to satisfy their needs.

Once the American election is over, perhaps some indication will be forthcoming regarding America's stockpiling intentions, without which the further outlook for the metal can only be considered as very obscure.

### Zinc Market Dull

Dull conditions have prevailed in the zinc market here in recent weeks, and although on balance prices are only moderately lower on the past month, this is almost certainly due in a large measure to the maintenance of the American domestic quotation.

In zinc, as in lead, the uncertainty which is beginning to develop regarding future U. S. stockpile plans after the present target has been reached in the not very distant future, is a somewhat disturbing factor. There seems to be a fairly plentiful supply of zinc concentrates being produced in the world, and at the moment consuming demand in this country and also on the Continent of Europe is rather below its recent peak.

The quiet state of the motor car industry here is the main adverse feature in this country, as it affects both brass and diecasting, although the recent quietness in both these fields is not entirely due to this cause. Galvanizing, generally speaking, is holding up pretty well and zinc consumption in this direction is being maintained, at any rate for the time being. While most people consider the present zinc price fairly reasonable, it could not be said that there is much bullish sentiment in evidence with regard to the metal at the present time.

### U. K. LEAD STATISTICS

There was a decrease in stocks of imported virgin lead at the end of July at 24,394 tons (of which 14,591 tons held by consumers and 465 in L. M. E. approved warehouses) compared with 26,045 tons (15,680 tons and 582 tons) at the end of June. Stocks of English refined lead showed at 11,038 tons (6,311 held yb consumers) a slight increase over the 10,176 tons at the end of June. Production of English refined during July was 7,673 tons, and consumption during the same period totaled 12,854 tons of imported virgin and 6,996 tons of English refined.

Full consumption details as supplied by the British Bureau of Non-Ferrous Metal Statistics, are given in the following details:

| | July 1956 | Jan.-July 1955 | Jan.-July 1956 |
|---|---|---|---|
| Cables ..... | 8,198 | 61,036 | 64,725 |
| Batteries — as Metal ..... | 1,952 | 17,268 | 16,777 |
| Battery Oxides.. | 1,912 | 16,595 | 15,948 |
| Tetraethyl Lead | 1,375 | 12,600 | 11,880 |
| Other Oxides and Compounds .. | 1,820 | 16,099 | 14,808 |
| White Lead ... | 790 | 6,434 | 6,308 |
| Shot ..... | 349 | 2,663 | 2,755 |
| Sheet & Pipe .. | 5,823 | 45,242 | 42,671 |
| Foil & Collapsible Tubes ..... | 457 | 2,969 | 3,008 |
| Other Rolled & Extruded .... | 665 | 4,804 | 4,640 |
| Solder ..... | 1,126 | 7,975 | 8,221 |
| Alloys ..... | 1,511 | 9,329 | 9,840 |
| Miscellaneous Uses ..... | 985 | 7,868 | 7,262 |
| Total Consumption. | 26,963 | 210,882 | 208,843 |
| of which: | | | |
| Imported Virgin Lead ..... | 12,854 | 119,084 | 103,142 |
| English Refined | 6,996 | 39,214 | 48,373 |
| Scrap including remelted ..... | 7,113 | 52,584 | 58,328 |

### U. K. TIN STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports stocks of tin at the end of July in the U. K. at 3,460 tons (of which 1,399 tons held by consumers) as against 3,424 tons at the end of June. Imports into the U. K. during July totaled 173 tons, and production 2,082 tons of primary and 34 tons of secondary.

Consumption totaled 1,854 tons — a breakdown of the figures is given below:

| | July 1956 | Jan.-July 1955 | Jan.-July 1956 |
|---|---|---|---|
| TINPLATE ..... | 820 | 5,884 | 5,740 |
| TINNING: | | | |
| Copper Wire .... | 40 | 311 | 291 |
| Steel Wire ..... | 8 | 64 | 64 |
| Other ..... | 60 | 484 | 466 |
| TOTAL ..... | 108 | 859 | 821 |
| SOLDER ..... | 217 | 1,365 | 1,709 |
| ALLOYS: | | | |
| White Metal .... | 291 | 2,277 | 2,032 |
| Bronze and Gunmetal ..... | 221 | 1,436 | 1,618 |
| Other ..... | 46 | 272 | 273 |
| TOTAL ..... | 558 | 3,985 | 3,923 |
| WROUGHT TIN (1) | | | |
| Foils & Sheets .. | 18 | 207 | 160 |
| Collapsible Tubes | 27 | 252 | 198 |
| Pipes, Wire and Capsules ..... | 2 | 27 | 26 |
| TOTAL ..... | 47 | 486 | 384 |
| CHEMICALS (2) . | 92 | 605 | 594 |
| OTHER USES (3) | 12 | 80 | 73 |
| | 1,854 | 13,264 | 13,244 |

Notes: (1) Includes Compo and "B" Metal.
(2) Mainly Tin Oxide.
(3) Mainly Powder.

### U. K. ZINC STATISTICS

According to figures received from the British Bureau of Non-Ferrous Metal Statistics, stocks of zinc in the U K. at the end of July at 49,169 tons (of which 21,080 tons held by consumers and 2,519 tons in London Metal Exchange approved warehouses) showed an increase on the 47,644 tons in stock at the end of June. Imports during July totaled 12,151 tons and production was 5,956 tons of virgin zinc. Consumption of virgin zinc was 16,866 tons and 374 tons of remelted and scrap. The breakdown of these figures is given in the following table:

| | July 1956 | Jan.-July 1955 | Jan.-July 1956 |
|---|---|---|---|
| Brass ..... | 7,751 | 71,278 | 65,219 |
| Galvanizing ... | 7,764 | 62,834 | 62,595 |
| of which: | | | |
| General ..... | 2,713 | 20,112 | 20,440 |
| Sheet ..... | 2,365 | 20,428 | 18,509 |
| Wire ..... | 1,283 | 12,776 | 12,496 |
| Tube ..... | 1,403 | 9,518 | 11,150 |
| Rolled Zinc .... | 1,949 | 13,257 | 13,969 |
| Zinc Oxide .... | 2,176 | 18,649 | 16,474 |
| Zinc Diecasting & Forming Alloy | 2,513 | 24,056 | 21,113 |
| Zinc Dust ..... | 680 | 6,488 | 5,454 |
| Miscellaneous Uses ..... | 993 | 7,035 | 6,919 |
| Total All Trades | 23,826 | 203,597 | 191,743 |
| of which: | | | |
| Virgin Zinc High Purity (99.99%) .... | 2,886 | 26,025 | 24,569 |
| Electro and High Grade (99.95%) .... | 4,463 | 37,821 | 37,176 |
| Prime Western g. o. b. & debased ..... | 9,517 | 84,270 | 74,704 |
| Remelted Zinc . | 374 | 3,277 | 3,276 |
| Brass and other copper alloy scrap (zinc content) .... | 3,760 | 30,810 | 30,833 |
| Scrap Zinc Metal, Alloy, Residues, Etc. (zinc content) ..... | 2,826 | 21,394 | 21,185 |

# United States Duties on Principal Ore and Metal Imports

**(Including Revisions in Effect June 30, 1956, under Geneva Agreements)**

**(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")**

## COPPER

NOTE—The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

| | |
|---|---|
| Copper ore and concentrates, usable as flux, etc., copper content | free |
| Copper ore and concentrates, product of Cuba and Philippines, copper content | free |
| Copper ore and concentrates, copper content | free |
| Regulus, black, or coarse copper, and cement copper, copper content | free |
| Unrefined black, blister, and converter copper in pigs or converter bars, copper content | free |
| Refined copper in ingots, plates or bars, copper content | free |
| Copper rolls, rods or sheets | 1¼c lb. |
| Copper seamelss tubes and tubing | 3½c lb. |
| Copper plain wire | 12½% |
| Copper brazed tubes† | 5.25 lb. |
| Old and scrap copper, fit only for remanufacture; and scale and clippings, copper content | free |

## BRASS

| | |
|---|---|
| Brass rods, sheets, plates, bars, strips, muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets | 2c lb. |
| Brass tubes and tubing, seamless | 2c lb. |
| Brass tubes, brazed, angles and channels | 6c lb. |
| Brass and bronze wire | 12½% |

## LEAD

NOTE—Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended Feb. 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

| | |
|---|---|
| Lead-bearing ores and mattes, n. s. p. f., lead content | ¾c lb. |
| Bullion or base bullion, lead content | 1 1/16c lb. |
| Pigs and bars, lead content | 1 1/16c lb. |
| Reclaimed, scrap, dross, lead content | 1 1/16c lb. |
| Babbitt metal and solder, lead content | 1 1/16c lb. |
| Pipe, sheet, shot, glaziers' lead, and wire | 1 5/16c lb. |
| Type metal and antimonial lead, lead content | 1 1/16c lb. |
| White lead | 1.05c lb. |
| Litharge | 1¼c lb. |
| Red lead | 15/16c lb. |
| Orange mineral | 1c lb. |

## ZINC

NOTE—Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended Feb. 12, 1952, and reimposed on July 14, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

| | |
|---|---|
| Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content | 6/10c lb. |
| Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content | 6/10c lb. |
| Zinc, old and worn out, fit only for remanufacture | ¾c lb. |
| Dross and skimmings | ¾c lb. |
| Zinc in blocks, pigs, or slabs | 7/10c lb. |
| Zinc in sheets | 1c lb. |
| Zinc sheets, plated with nickel or other base metal, or solutions | 1⅛c lb. |
| Zinc dust | 7/10c lb. |
| Zinc die-casting alloys | 12½% |
| Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry | 3/5c lb. |
| ground in or mixed with oil or water | 1c lb. |

## MISCELLANEOUS METALS AND ORES

| | |
|---|---|
| Aluminum, metal and alloys, crude, except alloys elsewhere provided for† | 1.40c lb. |
| Aluminum scrap | free |
| Aluminum plates, sheets, bars, rods, circles, squares, etc† | 2.80c lb. |
| Antimony ore, antimony content | free |
| Antimony metal and regulus | 2c lb. |
| Antimony needle or liquidated | ¼c lb. |
| Antimony oxide | 1c lb. |
| Antimony sulphides | ½c lb. & 12½% |
| Arsenic, metallic† | 2.80c lb. |
| Arsenious acid or white arsenic | free |
| Bauxite, crude* | free |
| Bauxite, refined | ¼c lb. |
| Bismuth | 1⅞% |
| Bismuth salts and compounds | 35% |
| Beryllium metal and compounds† | 23½% |
| Beryllium ore | free |
| Cadmium | 3¾c lb. |
| Cadmium flue dust, cadmium content | free |
| Chrome ore or chromite | free |
| Cobalt ore and concentrates, cobalt content | free |
| Chrome or chromium metal† | 11½% |
| Cobalt metal | free |
| Magnesium, metallic† | 17.20c lb. |
| Magnesium scrap | free |
| Magnesium alloys, powder, sheets, wire† | 19c lb. & 9½% |
| Manganese ores, containing over 10% manganese, manganese content | ¼c lb., except Cuba, free |
| Molybdenum ore or concentrates, molybdenum content† | 33c lb. |
| Nickel ore, matte and oxide | free |
| Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms | 1¼c lb. |
| Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes | 12½% |
| Nickel tubes, tubing | 6¼% |
| (if cold rolled, drawn or worked—2½% extra) | |
| Nickel scrap | free |
| Platinum, ores, platinum content, oz. troy | free |
| Platinum, grain, nuggets, sponge and scrap, oz. troy | free |
| Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy | free |
| Quicksilver or mercury | 25c lb. |
| Selenium and salts | free |
| Tantalum | 12½% |
| Tin ore, cassiterite, and black oxide of tin, tin content | free |
| Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f. | free |
| Tungsten ore or concentrates, tungsten content | 50c lb. |

*Crude bauxite import duty suspended for two years, effective July 16, 1954. †Tariff to be reduced 5% on June 30, 1957 and 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.

# SMELTERS CUT COPPER 2c TO 37c LB., PRODUCERS UNCHANGED AT 40c; FOURTH QUARTER DEMAND SLOW

## Lead, Zinc Firm as Gov't Continues Stockpile Purchases; Strength in Tin Reflects Malayan Strike Threat; Quicksilver Steady; Silver at 91c an Oz.

October 8, 1956

DEMAND for copper remained slow but producer and custom smelter quotations for the refined metal were unchanged during the month in review. Producers maintained their 40.00c a pound delivered level with smelters adhering to 39.00c a pound. Prospects for the producer quotation being maintained for the remainder of the year appeared good, with demand during November and December expected to improve. Labor peace in the domestic copper mining industry is virtually assured for the next three years, but the outlook for continuation of production in the Northern Rhodesian Copperbelt without any major interruptions was clouded. The Suez Canal situation also caused some uncertainty, more so in the case of tin than for other metals.

There were few new developments in lead and zinc, with prices maintained at 16.00c a pound New York and 13.50c East St. Louis for the Prime Western grade, respectively. Government buying for the stockpile continued to lend support.

Tin prices held at over one dollar, with spot Straits at New York quoted at 104.375c a pound on October 8; on September 20 it had been quoted at 105.50c.

Aluminum remained firm with primary 30-pound ingots, 99 per cent plus, unchanged at 27.10c a pound, f.o.b. Secondary aluminum ingots displayed a weaker trend. Silver advanced twice, by 0.125c per ounce on each occasion, and was quoted at 91.00c an ounce on October 3. Quicksilver was unchanged at $255 to $257 per flask.

### Copper Demand Slow

Consumers at this writing displayed little interest in acquiring copper. Producers were expected to shortly open their books for orders for November delivery. Business from the wire mills has been maintained at a fairly good level but buying so far by brass mills and other consumers has been disappointing. The lack of buying interest on the part of fabricators reflects their own disappointment over the fact that demand for their copper and copper alloy products by the automotive industry has not yet come up to expectations.

Large primary producers, however, saw no need to reduce their prices since they probably would not increase their sales to any large extent. The large consumers who buy regularly from the primary producers will continue doing so, whether the price is 40.00c or lower. Assured of an outlet for their output, there is little incentive for the producers to shade their prices. Also, sales of refined copper by custom smelters at 39.00c a pound, 1.00c a pound under the producers' level, have been relatively small.

### SMELTER ELECTRO COPPER REDUCED 2c TO 37c LB.

**Copper:** Custom smelter electrolytic copper was reduced 2.00c on October 15 to 37.00c a pound delivered; refiners were offering only 28.50c a pound for No. 2 heavy copper and wire scrap on October 19. Fabricators, in an effort to meet foreign competition, cut prices for copper water tubes about 10 per cent.

The domestic smelter price cut followed the £20 reduction in the Rhodesian Selection Trust fixed copper price to British consumers, to £280 per long ton (from 37.50c to 35.00c a pound) on October 15. Cash electro copper on the London Metal Exchange was quoted at £279½ (34.9375c a pound) on October 16.

Union Miniere du Haut Katanga on October 18 reduced its electro copper price to a basis of 35.10c a pound f.a.s. New York, down 1.30c. The French agency, GIRM, on the same date reduced its price to French fabricators at 287 francs per kilos (36.32c a pound f.a.s. N. Y.), a drop of 1.03c.

September domestic refined copper statistics, in tons, follow with August totals in parentheses: output, 112,481 (122,108); deliveries to fabricators, 104,486 (109,618); stocks in hands of producers at end of month, 93,202 (96,450).

**Lead, Zinc:** The U. S. Agriculture Department in August, in exchange for surplus farm products, contracted for $26,900,000 worth of foreign origin zinc and $1,100,000 worth of foreign origin lead. On the basis of 13.50c a pound for zinc, the August contract would yield about 99,600 tons of zinc, and lead at 16.00c would yield about 3,400 tons of that metal. Since June, such barter dealers are estimated to have yielded 125,000 tons of zinc and 50,000 to 60,000 tons of lead for the U. S. supplementary stockpile.

**Tin:** Spot Straits tin was quoted at 106.25c a pound New York on October 19; prompt metal was quoted at 105.75c.

**Platinum:** Spot platinum will begin on December 3 on the N. Y. Mercantile Exchange. Spot platinum ranged from $103 to $106 per ounce at New York.

### Price Outlook Promising

The feeling in copper producing circles was almost unanimous that the market has weathered the worst. Having gone through July, August and September without any weakness developing in the 40.00c level, producers regard the prospects as good that the price will hold for the balance of the year since November and December are expected to be good months businesswise.

### Gov't Action On Exports

That the copper supply situation was easing was evident in the Government's action relaxing export quotas on red metal in the fourth quarter. (See Washington Report in this issue on page 5.) The Government also withdrew a regulation requiring refined copper exporters to report if the metal was of foreign or foreign — domestic origin, as a result of its action on the export quotas. Shippers previously had to certify they were not exporting domestic refined copper. The Government, however, now requires that applications for export of refined copper, copper scrap and copper-base alloy scrap name the foreign consumer; previously only refined copper applications had to include this information.

Current London Metal Exchange copper quotations are below those of a month ago, with consumer demand on the Continent slowing down. It was evident that the London market was not showing much concern over the labor situation in the Northern Rhodesia Copperbelt.

As previously reported in this space, the African Mineworkers' Union feels quite strongly about what it considers poaching on its membership by the African Staff Association. On September 12 the Northern Rhodesian Government declared a state of emergency following a series of three-day strikes at various Copperbelt mines by the AMU, with several union leaders arrested. While AMU members have drifted back to work, the labor outlook is still uncertain and the possibility of a major interruption in production in the Copperbelt can not be disregarded.

### U. K. Copper Stockpile Sales

Further weakness in copper on the LME on October 8 was attributed in part to a LME committee meeting called for October 10 by the British Board of Trade to discuss the disposal of 26,000 tons of copper from the U. K. strategic stockpile.

The proposed sales were first announced in July with the liquidation to have begun in August and extended over a period of six months. No action was taken in August, however, because of the Summer holidays and for a time the feeling prevailed that because of the Suez trouble, the Board's disposal of the copper might be held up for some time.

Although the Board proposed to release the stocks gradually in order to "avoid undue disturbance to the market," the feeling among British metal circles has been that the addition to the' market of supplies equivalent to 5 or 6 per cent of the U. K.'s consumption could have an important impact on the price trend.

The large Belgian Congo copper producer, Union Miniere du Haut Katanga reduced its price by 90 points to the equivalent of 36.85c a pound, f.a.s. New York, on October 2. The previous price of 37.75c had prevailed

since August 23, following a 85-point decline.

### Lead and Zinc Firm

Both the lead and zinc markets displayed a firm tone, supported in part by continuation of purchases by the Government of the metals for its long-term stockpile. As long as the Government takes quantities of the metals off the market each month there is little likelihood of lead and zinc prices easing.

Some industry quarters estimated that the stockpile goals are in sight and probably will be reached by the end of this year. The estimated purchase goals were 300,000 tons of zinc and 200,000 tons of lead. Mining industry quarters have termed the stockpile program as being only a stopgap solution to the industry's problems and the American Mining Congress has urged increased duties for lead and zinc. (See Washington Report in this issue on page 5.)

A moderate volume of business was taking place for lead at 16.00c a pound New York for shipment this month. Buying for November shipment had not yet made itself felt in any volume.

Zinc producers were satisfied with the volume of business they have been doing and appeared confident that demand will pick up later in October. Most business was done at the spot price of 13.50c a pound East St. Louis for the Prime Western grade, with occasional orders placed at the monthly average.

### Zinc September Statistics

The industry's expectations of an improvement in the September statistical position of zinc were realized. Shipments exceeded slab zinc output during that month, resulting in a reduction in producers' stocks for the first time in six month. Unfilled orders on producers 'books at the end of September rose to 64,450 tons, an increase of 8,681 tons from the August total and the largest since the end of November, 1955.

Production in September came to 90,235 tons as against 80,545 tons in August. Shipments were 73,142 tons, a gain of 2,435 tons over the previous month, while stocks in producers' hand declined to 102,165 tons at the end of September from 104,307 tons at the end of August.

### Malayan Strike Threat

Fear was expressed that the Malayan tin mines may be struck as a result of the decision by the Industrial Court in Malaya against the Mining Employes Union's demand for payment for weekly rest days retroactive to November, 1954. The Employers' Association had contended that there was no justification for higher wages in 1954 and that a new wage scheme was implemented in 1955 when conditions improved.

The Malayan news firmed up tin prices in the domestic market, mainly for spot and prompt positions, spot Straits tin at New York on October 8 was quoted at 104.375c a pound as against the last previously quoted price in this space of 105.50c on September 20. The 105.50c was the high for the September 20-October 8 period, with the low of 102.875c registered on October 2.

### Aluminum Firm

Primary aluminum prices continued firm on the basis of 27.10c a pound, f.o.b. for 30-pound, 99 per cent plus primary ingot. Secondary aluminum ingot prices displayed an easier trend, the pickup in demand during the fourth quarter having failed to materialize as anticipated.

Total supply of aluminum during 1956 has been the greatest in history, and shipments of aluminum products to consumers likewise are expected to set a new record. This optimistic observation was made at the American Mining Congress meeting at Los Angeles on October 4, in an address prepared by Lawrence Litchfield, Jr., vice president of Aluminum Co. of America. Mr. Litchfield's paper, which was read to the members, estimated primary aluminum output in 1956 will surpass that of last year by at least 100,000 tons.

The New York silver price advanced to 91.00c an ounce as the result of two increases on October 1 and 3 of 0.125c an ounce on each occasion.

Quicksilver was steady with spot unchanged at $255 to $257 per flask of 76 pounds. The market undertone was somewhat firmer and the possibility of an increase of one dollar or so per flask was indicated should there be any strengthening in demand.


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# Daily Metal Quotations in September, 1956

**The following quotations are taken from the Daily Metal Reporter**

**(In Cents Per Pound)**

| SEPTEMBER | Copper | | | | Tin — Straits New York | | Lead | | Zinc | | | | | Aluminum | Antimony | Silver |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Producers' Price Del. Conn. | Custom Smelters' or Outside Price | Electro f. o. b. Refinery | Lake Del. | Spot | Prompt | New York | Outside St. Louis | Prime West. f. o. b. E. St. Louis | Prime West. Del. N. Y. | Brass Spec. f. o. b. E. St. Louis | High Grade Delivered | Spec. High Grade Delivered | 30-Lb. Ingot 99% Plus (f. o. b.) | Domestic Spot 99.5% f.o.b. Laredo | (Cents Per Ounce) New York |
| 1 | 40.00 | 39.00 | 39.20 | 40.00 | ..... | ..... | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | .... |
| 4 | 40.00 | 39.00 | 39.20 | 40.00 | 100.375 | 100.125 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 5 | 40.00 | 39.00 | 39.20 | 40.00 | 100.50 | 100.25 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 6 | 40.00 | 39.00 | 39.20 | 40.00 | 100.625 | 100.375 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 7 | 40.00 | 39.00 | 39.20 | 40.00 | 100.875 | 100.625 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 8 | 40.00 | 39.00 | 39.20 | 40.00 | ..... | ..... | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | .... |
| 10 | 40.00 | 39.00 | 39.20 | 40.00 | 101.25 | 101.125 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 11 | 40.00 | 39.00 | 39.20 | 40.00 | 101.875 | 101.75 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 12 | 40.00 | 39.00 | 39.20 | 40.00 | 104.125 | 104.00 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 13 | 40.00 | 39.00 | 39.20 | 40.00 | 106.875 | 106.75 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 14 | 40.00 | 39.00 | 39.20 | 40.00 | 107.875 | 107.75 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 15 | 40.00 | 39.00 | 39.20 | 40.00 | ..... | ..... | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | .... |
| 17 | 40.00 | 39.00 | 39.20 | 40.00 | 106.375 | 106.25 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 18 | 40.00 | 39.00 | 39.20 | 40.00 | 106.00 | 106.00 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 19 | 40.00 | 39.00 | 39.20 | 40.00 | 105.25 | 105.00 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 20 | 40.00 | 39.00 | 39.20 | 40.00 | 105.50 | 105.375 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 21 | 40.00 | 39.00 | 39.20 | 40.00 | 104.625 | 104.625 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 22 | 40.00 | 39.00 | 39.20 | 40.00 | ..... | ..... | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | .... |
| 24 | 40.00 | 39.00 | 39.20 | 40.00 | 104.875 | 104.75 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 25 | 40.00 | 39.00 | 39.20 | 40.00 | 104.00 | 103.75 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 26 | 40.00 | 39.00 | 39.20 | 40.00 | 104.00 | 103.25 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 27 | 40.00 | 39.00 | 39.20 | 40.00 | 103.375 | 102.625 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 28 | 40.00 | 39.00 | 39.20 | 40.00 | 104.00 | 103.25 | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | 90.75 |
| 29 | 40.00 | 39.00 | 39.20 | 40.00 | ..... | ..... | 16.00 | 15.80 | 13.50 | 14.00 | 13.75 | 14.85 | 15.25 | 27.10 | 33.00 | .... |
| **AV.** | **40.00** | **39.00** | **39.20** | **40.00** | **103.809** | **103.559** | **16.00** | **15.80** | **13.50** | **14.00** | **13.75** | **14.85** | **15.25** | **27.10** | **33.00** | **90.75** |
| **HI.** | **40.00** | **39.00** | **39.70** | **40.00** | **107.875** | **107.75** | **16.00** | **15.80** | **13.50** | **14.00** | **13.75** | **14.85** | **15.25** | **27.10** | **33.00** | **90.75** |
| **LO.** | **40.00** | **39.00** | **38.70** | **40.00** | **100.375** | **100.125** | **16.00** | **15.80** | **13.50** | **14.00** | **13.75** | **14.85** | **15.25** | **27.10** | **33.00** | **90.75** |

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a daily market authority on copper, lead, zinc, tin, aluminum; iron and steel, also scrap metals and scrap iron. Read by executives who buy ferrous and non-ferrous metals and metal products.

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**DAILY METAL REPORTER**

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## *Current Copper, Lead and Zinc Output in Excess of Demand*

(Continued from page 8)

ernment would take up to 200,000 tons of lead and 300,000 tons of zinc. Although no official figures have been released recently, it is quite clear that the target figures are being rapidly approached and may, in fact, be completed by year end.

The barter program, by which metals are swapped for grain, is handed separately. We have no data as to the potential limits or even the amounts already acquired under barter. Press reports, for which the writer cannot vouch, place the quantities at 30,000 to 40,000 tons of lead and over 100,000 tons of zinc, all of this to be delivered by the year end.

Will the Government continue buying from domestic producers for stockpile after the original targets have been reached? Will it continue to barter for metal of foreign origin? I doubt that any on knows the answer to these questions. The outcome of the national elections in November is certain to have an important influence.

If production of lead and zinc in the areas outside the Iron Curtain continues to exceed consumption, then the stockpile effort will have to continue indefinitely or prices will have to drop to cut off some production. Many of you feel that an alternative would be imposition of higher import duties or of import quotas. Such measures might help domestic producers to receive a proportionately better price than foreign producers but it still would not cure the excess of supply over demand. Some mines somewhere would have to close down or curtail, if the excess continues and there is no stockpiling.

In the long run, therefore, the only satisfactory solution for all producers everywhere is for consumption to catch up with production. In lead the gap is not too wide; in zinc, one must admit, it is considerable but the closing of it is not beyond the realm of possibility.

To summarize, although the nonferrous metal miners as a group are making larger profits this year then they did last, the maintenance of this happy state of events in the future is by no means assured. Actual production is currently in excess of demand for the three major metals; continuation of present prices (which are necessary to maintain present profits) depends either on an improvement in demand or on government intervention in one form or another.

## *Total Aluminum Supply in '56 Estimated Largest in History*

(Continued from page 11)

alloying agent, largely by the aluminum industry. A large quantity was also used for reduction purposes. Metals such as titanium, uranium, thorium, and zirconium are produced solely or primarily by reduction with magnesium. The use of magnesium for cathodic or anodic protection is also growing at a rapid rate, with marine, petroleum and water heating industries all consuming ever-increasing amounts. It is significant that the non-structural uses for magnesium are destructive of the metal itself in that it loses its identity and therefore does not return to the market in the form of scrap.

The higher-purity magnesium that will be marketed by the forthcoming second producer will be especially valuable in some of the non-structural uses, thus freeing magnesium now being produced by the electrolytic process for other structural purposes. Magnesium ingot of 99.8 per cent purity, priced at 33¼c per pound at the start of the year, was increased 1¼c per pound in April and 1½c in August, bringing its price to 36c per pound. No indication has been given regarding the size of the premium that will be charged for the higher purity metal, 99.95 per cent or better, that is to be marketed by the Alabama Metallurgical Corporation.

## *Washington Report*

(Continued from page 5)

end of 1954 there were 8,189 establishments (places of business with one or more paid employes) in the continental United States primarily engaged in the buying and selling of scrap iron and steel and waste materials, including scrap metals. Of this total, 3,719 firms sold and bought scrap iron and steel and did $1,200,000,000 in sales in 1954. There were 1,518 establishments dealing in nonferrous metallic scrap, with sales amounting to $500,-822,000.

### Machine Tool Funds

The Pentagon will ask Congress this coming year for about $100,-000,000 to replace military-owned machine tools used in defense work.

The Pentagon estimates it owns more than 275,000 machine tools, many of which are used by private firms in fulfilling military contracts.

# Copper Brands

**Deliverable Against Commodity Exchange, Inc.**

| Brand or Marks | Producer | Grade |
|---|---|---|
| B. E. R. | American Smelting & Refining Co. (Baltimore, Md.) | Electrolytic |
| P. A. | American Smelting & Refining Co. (Maurer, N. J.) | Electrolytic |
| T | American Smelting & Refining Co. (Tacoma, Wash.) | Electrolytic |
| B. & M. | Anaconda Copper Mining Co. | Electrolytic |
| AE | Andes Copper Mining Co. | Electrolytic |
| BOLIDEN | Bolidens-Gruvaktiebolag | Electrolytic |
| C. C. R. | Canadian Copper Refiners Ltd. (Montreal) | Electrolytic |
| C de P Peru | Cerro de Pasco Corporation | Electrolytic |
| C. C. C. | Chile Copper Company | Electrolytic |
| F E C | Falconbridge Nickel Mines, Ltd. | Electrolytic |
| K U E | Kennecott Copper Corp. | Electrolytic |
| L. M. C. | Lewin Metals Corporation | Electrolytic |
| M U F | Mufulira Copper Mines, Ltd. | Electrolytic |
| N A | Norddeutsche Affinerie | Electrolytic |
| O R C | Ontario Refining Co., Ltd. | Electrolytic |
| A. L. S. | Philps Dodge Refining Corp. (For Adolph Lewisohn Selling Corp.) | Electrolytic |
| L. N. S. | Phelps Dodge Refining Corp. | Electrolytic |
| P • D | Phelps Dodge Corporation | Electrolytic |
| N. E. C. | Raritan Copper Works | Electrolytic |
| R E C | Rhokana Corporation | Electrolytic |
| B O R | Rudnici Bakra i Topionice | Electrolytic |
| U M K | Union Miniere du Haut Katanga | Electrolytic |
| D R W | †United States Metals Refining Co. | Electrolytic |
| AMCO | †United States Metals Refining Co. | Electrolytic |
| OFHC | †United States Metals Refining Co. | Electrolytic |
| W E K | Zinnwerke Wilhelmsburg G.m.b.H. | Electrolytic |

†Subsidiary, The American Metal Co., Ltd.

| Brand or Marks | Producer | Grade |
|---|---|---|
| C & H | Calumet & Hecla Consolidated Copper Co. | Lake |
| C. R. | Copper Range Company | Lake |
| Q. M. CO. | Quincy Mining Company | Lake |

| Brand or Marks | Producer | Grade |
|---|---|---|
| B. C. R. | British Copper Refiners, Ltd. | Fire Refined High Conductivity |
| N. H. E. | Nassau Smelting & Refining Co., Inc. | Fire Refined High Conductivity |
| A M CO<br>R H C | United States Metals Refining Company | Fire Refined High Conductivity |

| Brand or Marks | Producer | Grade |
|---|---|---|
| • • • (3 Star) | Braden Copper Company | Fire Refined |
| K C M | Kennecott Copper Corporation | (other than |
| M T D | Messina (Transvaal) Development Co. | Lake & Fire Refined |
| P. D. M. | Phelps Dodge Corporation | High |
| R | †United States Metals Refining Company | Conductivity) |

## Official List of Approved Refiners

**Whose CATHODES are deliverable against Commodity Exchange, Inc., Copper Contract**

American Smelting & Refining Co.
Anaconda Copper Mining Co.
Andes Copper Mining Co.
Bolidens Gruvaktiebolag
Canadian Copper Refiners, Ltd.
Cerro de Pasco Copper Corp.
Chile Copper Company
Consolidated Mining & Smelting Co.
Falconbridge Nickel Mines, Ltd.
Kennecott Copper Corp.
Lewin Metals Corp.
Mufulira Copper Mines, Ltd.
Norddeutsche Affinerie
Ontario Refining Co., Ltd.
Phelps Dodge Refining Corp.
Phelps Dodge Corporation
Raritan Copper Works
Rhokana Corporation
Rudnici Bakra i Topionice
Union Miniere du Haut Katanga
United States Metals Refining Co.
Zinnwerke Wilhelmsburg G.m.b.H.

# Copper Statistics Reported by Copper Institute

## Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

| | Crude Production | | Refined | Deliveries to | Refined Stock | Stock Increases or Decreases | | |
|---|---|---|---|---|---|---|---|---|
| | Primary | Secondary | Production | Customers | End of Period | Blister | Refined | Total |
| 1955 | | | | | | | | |
| July | 167,746 | 8,379 | 159,499 | 149,643 | 219,643 | +16,626 | + 9,698 | +26,324 |
| Aug. | 195,394 | 10,138 | 208,974 | 200,049 | 230,022 | — 3,441 | +10,379 | + 6,938 |
| Sept. | 236,949 | 13,788 | 248,481 | 262,118 | 228,002 | + 2,256 | — 2,020 | + 236 |
| Oct. | 245,462 | 11,439 | 244,255 | 246,898 | 227,261 | +12,646 | — 741 | +11,905 |
| Nov. | 229,736 | 9,304 | 239,963 | 248,827 | 218,519 | — 1,283 | — 8,819 | —10,025 |
| Dec. | 214,114 | 11,713 | 250,349 | 247,222 | 221,331 | —24,522 | + 1,643 | —21,710 |
| 1955 Total | 2,613,662 | 133,065 | 2,728,309 | 2,744,391 | 221,331 | +18,418 | — 8,552 | +11,112 |
| 1956 | | | | | | | | |
| Jan. | 233,897 | 11,250 | 237,300 | 242,425 | 217,315 | + 7,847 | — 4,016 | + 3,831 |
| Feb. | 228,409 | 11,355 | 243,458 | 236,841 | 226,686 | — 193 | + 9,371 | + 9,178 |
| Mar. | 243,676 | 14,293 | 258,462 | 261,814 | 225,827 | — 493 | — 859 | — 1,352 |
| Apr. | 232,986 | 14,716 | 254,462 | 242,244 | 238,125 | — 6,760 | +12,298 | + 5,538 |
| May | 233,963 | 18,608 | 266,551 | 253,871 | 249,365 | —13,051 | +11,240 | — 2,740 |
| June | 238,814 | 11,360 | 251,382 | 236,714 | 266,221 | + 1,309 | +14,091 | +15,130 |
| July | 233,182 | 11,174 | 240,633 | 198,800 | 303,225 | + 3,723 | +37,004 | +40,727 |
| Aug. | 241,295 | 10,005 | 242,814 | 224,546 | 315,572 | + 8,486 | +12,347 | +20,833 |
| Sept. | 222,866 | 7,975 | 218,422 | 220,708 | 309,022 | +12,419 | — 6,550 | + 5,869 |

## In U. S. A.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1955 | | | | | | | | |
| July | 31,346 | 7,614 | 51,182 | 60,143 | 36,293 | ..... | — 2,240 | ..... |
| Aug. | 67,990 | 9,364 | 98,732 | 90,516 | 49,350 | ..... | +13,057 | ..... |
| Sept. | 96,343 | 12,739 | 139,880 | 145,590 | 53,625 | ..... | + 4,275 | ..... |
| Oct. | 99,514 | 10,279 | 127,865 | 134,844 | 49,738 | ..... | — 3,887 | ..... |
| Nov. | 94,287 | 7,888 | 133,711 | 142,830 | 48,736 | ..... | — 1,002 | ..... |
| Dec. | 93,186 | 10,912 | 145,423 | 139,512 | 61,554 | ..... | +12,818 | ..... |
| 1955 Total | 1,036,702 | 124,760 | 1,467,448 | 1,446,354 | 61,554 | ..... | +14,446 | ..... |
| 1956 | | | | | | | | |
| Jan. | 96,732 | 10,353 | 123,917 | 130,431 | 50,016 | ..... | —11,538 | ..... |
| Feb. | 89,326 | 11,697 | 127,917 | 139,383 | 47,053 | ..... | — 2,963 | ..... |
| Mar. | 99,681 | 12,596 | 144,027 | 141,590 | 51,595 | ..... | + 4,542 | ..... |
| Apr. | 95,499 | 13,780 | 140,032 | 139,927 | 54,887 | ..... | + 3,292 | ..... |
| May | 98,208 | 17,475 | 142,445 | 140,587 | 53,443 | ..... | — 1,444 | ..... |
| June | 98,496 | 12,471 | 136,713 | 131,299 | 60,671 | ..... | + 4,463 | ..... |
| July | 84,787 | 10,387 | 125,401 | 97,698 | 87,944 | ..... | +27,273 | ..... |
| Aug. | 91,282 | 9,545 | 122,108 | 109,618 | 96,450 | ..... | + 8,506 | ..... |
| Sept. | 88,885 | 7,126 | 112,484 | 104,486 | 93,202 | ..... | — 3,248 | ..... |

## Outside U. S. A.*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1955 | | | | | | | | |
| July | 135,900 | 765 | 109,659 | 89,500 | 183,350 | ..... | +11,938 | ..... |
| Aug. | 127,405 | 774 | 110,242 | 109,533 | 180,672 | ..... | — 2,678 | ..... |
| Sept. | 140,606 | 1,049 | 108,601 | 116,528 | 174,377 | ..... | — 6,295 | ..... |
| Oct. | 145,948 | 1,160 | 116,490 | 112,051 | 177,523 | ..... | + 3,146 | ..... |
| Nov. | 135,089 | 1,419 | 107,097 | 105,997 | 169,783 | ..... | — 7,740 | ..... |
| Dec. | 120,928 | 801 | 104,926 | 107,710 | 159,777 | ..... | —10,006 | ..... |
| 1955 Total | 1,576,960 | 8,305 | 1,260,861 | 1,298,037 | 159,777 | ..... | —21,752 | ..... |
| 1956 | | | | | | | | |
| Jan. | 137,165 | 897 | 113,502 | 111,994 | 167,299 | ..... | + 7,522 | ..... |
| Feb. | 138,918 | 1,808 | 115,541 | 97,458 | 179,633 | ..... | +12,334 | ..... |
| Mar. | 143,995 | 1,697 | 114,435 | 120,224 | 174,232 | ..... | — 5,401 | ..... |
| Apr. | 137,487 | 936 | 114,430 | 102,317 | 183,238 | ..... | + 9,006 | ..... |
| May | 135,755 | 1,133 | 124,106 | 113,284 | 195,922 | ..... | +12,684 | ..... |
| June | 140,318 | 1,136 | 114,669 | 105,415 | 205,550 | ..... | + 9,628 | ..... |
| July | 148,395 | 787 | 115,232 | 101,102 | 215,281 | ..... | + 9,731 | ..... |
| Aug. | 150,013 | 460 | 120,706 | 114,928 | 219,122 | ..... | + 3,841 | ..... |
| Sept. | 133,981 | 759 | 105,938 | 116,222 | 215,820 | ..... | — 3,302 | ..... |

*Excluding Russia, Yugoslavia, Norway, Sweden, Japan, Australia.

## Electrolytic Copper

**Producers' Price, Del. Valley**

**Monthly Average Prices**

(Cents Per Pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 24.50 | 29.88 | 30.24 | 43.00 |
| Feb. | 25.46 | 29.88 | 33.00 | 44.03 |
| Mar. | 31.49 | 29.93 | 33.222 | 46.00 |
| Apr. | 30.59 | 29.98 | 36.00 | 46.00 |
| May | 29.72 | 30.00 | 36.00 | 46.00 |
| June | 29.94 | 30.00 | 36.00 | 46.00 |
| July | 29.92 | 30.00 | 36.00 | 41.56 |
| Aug. | 29.69 | 30.00 | 37.81 | 40.00 |
| Sept. | 29.75 | 30.00 | 43.00 | 40.00 |
| Oct. | 29.80 | 30.00 | 43.00 | .... |
| Nov. | 29.88 | 30.00 | 43.00 | .... |
| Dec. | 29.88 | 30.00 | 43.00 | .... |
| Aver. | 29.15 | 29.27 | 37.522 | .... |

## Electrolytic Copper

**Custom Smelters' Price, Del. Valley**

**Monthly Average Prices**

(Cents Per Pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 24.50 | 29.75 | 30.48 | 50.22 |
| Feb. | 25.804 | 29.75 | 33.00 | 52.07 |
| Mar. | 33.269 | 29.866 | 33.667 | 53.11 |
| Apr. | 31.18 | 29.965 | 36.00 | 48.88 |
| May | 29.785 | 30.00 | 36.00 | 44.221 |
| June | 29.875 | 30.00 | 36.00 | 40.00 |
| July | 29.846 | 30.00 | 36.00 | 38.14 |
| Aug. | 29.375 | 30.00 | 40.14 | 39.32 |
| Sept. | 29.50 | 30.00 | 50.00 | 39.00 |
| Oct. | 29.606 | 30.00 | 45.99 | .... |
| Nov. | 29.75 | 30.00 | 45.84 | .... |
| Dec. | 29.75 | 30.00 | 49.42 | .... |
| Aver. | 29.35 | 29.944 | 39.38 | .... |

## Lake Copper

**Producers' Price, Delivered**

**Monthly Average Prices**

(Cents Per Pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 24.625 | 30.00 | 30.12 | 43.00 |
| Feb. | 24.625 | 30.00 | 33.00 | 43.783 |
| Mar. | 32.00 | 30.00 | 33.56 | 46.00 |
| Apr. | 32.23 | 30.00 | 36.00 | 46.00 |
| May | Nom. | 30.00 | 36.00 | 46.00 |
| June | 30.125 | 30.00 | 36.00 | 46.00 |
| July | 30.125 | 30.00 | 36.00 | 41.68 |
| Aug. | 30.125 | 30.00 | 37.46 | 40.00 |
| Sept. | 30.125 | 30.00 | 43.00 | 40.00 |
| Oct. | 30.125 | 30.00 | 43.00 | .... |
| Nov. | 30.125 | 30.00 | 43.00 | .... |
| Dec. | 30.038 | 30.00 | 43.00 | .... |
| Aver. | 29.47 | 30.00 | 37.51 | .... |

# Fabricators' Copper Statistics

(In tons of 2,000 pounds)

| | Fabricators' Stocks of Refined Cop. | Unfilled Purchases of Refined by Fab. from Producers | Fabricators' Working Stocks | Unfilled Sales by Fabricators to Customers | Actual Copper Consmd. by Fabricators | Excess Fabricators' Stocks Over Orders Bkd. |
|---|---|---|---|---|---|---|
| 1950 | | | | | | |
| Total | 290,241 | 92,372 | 288,392 | 313,052 | 1,438,327 | —218,831 |
| 1951 | | | | | | |
| Total | 280,402 | 32,147 | 295,385 | 303,050 | 1,392,111 | —285,886 |
| 1952 | | | | | | |
| Total | 333,455 | 32,652 | 292,157 | 275,312 | 1,389,451 | —201,362 |
| 1953 | | | | | | |
| Total | 380,881 | 25,022 | 309,664 | 170,917 | 1,375,869 | — 74,678 |
| 1954 | | | | | | |
| Mar. | 341,693 | 28,836 | 304,065 | 123,887 | 103,796 | — 57,423 |
| Apr | 341,616 | 30,677 | 302,391 | 124,559 | 104,943 | — 54,657 |
| May | 349,796 | 33,210 | 305,504 | 123,039 | 102,810 | — 45,537 |
| June | 351,518 | 43,723 | 304,833 | 122,218 | 104,531 | — 31,810 |
| July | 370,287 | 41,104 | 307,352 | 130,576 | 80,751 | — 26,537 |
| Aug. | 359,474 | 58,007 | 302,423 | 131,514 | 102,966 | — 16,456 |
| Sept. | 341,726 | 50,650 | 300,603 | 148,515 | 106,628 | — 56,742 |
| Oct. | 330,787 | 50,240 | 299,068 | 135,140 | 116,232 | — 53,181 |
| Nov. | 335,315 | 55,517 | 301,097 | 137,076 | 114,392 | — 47,341 |
| Dec. | 360,526 | 58,125 | 304,619 | 136,581 | 99,479 | — 22,549 |
| Total | ..... | ..... | ..... | ..... | 1,232,090 | ..... |
| 1955 | | | | | | |
| Jan. | 334,105 | 66,122 | 302,658 | 159,016 | 136,539 | — 61,447 |
| Feb. | 323,425 | 75,840 | 301,597 | 180,898 | 118,786 | — 83,230 |
| Mar. | 311,235 | 85,859 | 301,937 | 187,827 | 143,544 | — 92,670 |
| Apr. | 316,575 | 88,992 | 304.117 | 205,308 | 115,073 | —108,868 |
| May | 327,343 | 111,715 | 309,219 | 323,279 | 113,485 | —102,440 |
| June | 327,696 | 126,703 | 309,972 | 234,578 | 132,377 | — 90,151 |
| July | 312,587 | 165,505 | 301,048 | 286,095 | 75,846 | —109,051 |
| Aug. | 304,097 | 150,854 | 303,089 | 283,653 | 97,688 | —131,791 |
| Sept. | 334,996 | 133,391 | 314,111 | 270,102 | 113,628 | —115,826 |
| Oct. | 353,469 | 135,075 | 313,048 | 275,255 | 115,453 | — 99,759 |
| Nov. | 373,314 | 139,855 | 313,779 | 283,953 | 122,332 | — 84,563 |
| Dec. | 389,974 | 139,094 | 314,145 | 293,264 | 127,006 | — 78,341 |
| Total | ..... | ..... | ..... | ..... | 1,412,287 | ..... |
| 1956 | | | | | | |
| Jan. | 376,753 | 143,815 | 312,128 | 305,942 | 138,711 | — 97,502 |
| Feb. | 388,823 | 135,637 | 319,279 | 282,314 | 130,923 | — 77,133 |
| Mar. | 392,143 | 140,348 | 319,056 | 291,465 | 135,746 | — 78,030 |
| Apr. | 413,979 | 135,071 | 319,247 | 266,239 | 118,839 | — 36,436 |
| May | 435,083 | 131,023 | 318,592 | 249,352 | 122,253 | — 1,838 |
| June | 451,126 | 114,223 | 324,970 | 227,097 | 113,835 | + 13,282 |
| July | 465,015 | 109,040 | 334,584 | 220,810 | 81,275 | + 18,661 |
| Aug. | 457,679 | 115,295 | 338,818 | 221,975 | 117,937 | + 12,181 |

# Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

| | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|---|---|---|---|---|---|
| Jan. .... | 7,080 | 10,172 | 17,084 | 15,763 | 6,640 | 4,528 | 6,486 | 9,859 | 11,047 | 14,322 |
| Feb. .... | 5,394 | 11,890 | 20,238 | 12,500 | 5,158 | 3,633 | 10,337 | 8,490 | 15,198 | 14,497 |
| Mar. .... | 9,187 | 11,954 | 20,678 | 13,538 | 7,912 | 5,243 | 19,991 | 9,738 | 12,198 | 15,921 |
| Apr. .... | 13,065 | 15,125 | 15,968 | 12,304 | 8,553 | 6,214 | 16,584 | 9,004 | 13,162 | 17,233 |
| May .... | 14,264 | 16,357 | 14,237 | 8,749 | 8,458 | 8,033 | 10,857 | 8,687 | 15,133 | 20,805 |
| June .... | 9,883 | 11,178 | 8,809 | 20,523 | 8,628 | 4,425 | 10,945 | 13,309 | 14,765 | 14,758 |
| July .... | 8,578 | 8,370 | 7,782 | 10,040 | 6,642 | 5,188 | 9,063 | 10,260 | 9,988 | 12,632 |
| Aug. .... | 8,572 | 17,081 | 8,246 | 10,452 | 6,113 | 5,003 | 7,137 | 10,100 | 12,197 | 12,510 |
| Sept. ... | 10,611 | 16,001 | 10,980 | 4,903 | 3,561 | 4,667 | 9,042 | 10,641 | 15,037 | 9,518 |
| Oct. .... | 8,582 | 10,854 | 6,401 | 9,459 | 3,336 | 4,602 | 10,065 | 11,662 | 12,897 | ..... |
| Nov. .... | 8,070 | 7,625 | 15,347 | 9,237 | 8,179 | 4,724 | 7,815 | 10,879 | 9,865 | ..... |
| Dec. .... | 9,154 | 11,826 | 10,533 | 7,178 | 4,538 | 6,208 | 11,476 | 14,876 | 13,180 | ..... |
| Total ... | 112,386 | 147,931 | 156,303 | 142,067 | 71,812 | 62,370 | 129,798 | 127,449 | 154,714 | ..... |

*As compiled by Copper Institute.

# Brass and Bronze Ingot Monthly Shipments

(Net Tons)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

| | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Jan. .... | 29,196 | 27,841 | 26,998 | 19,456 | 18,874 | 28,416 | 28,315 | 24,423 | 20,661 | 25,201 | 27,736 |
| Feb. .... | 24,680 | 24,686 | 22,487 | 15,026 | 18,487 | 27,168 | 24,211 | 25,429 | 19,920 | 25,849 | 24,949 |
| Mar. ... | 27,176 | 17,477 | 24,282 | 14,550 | 22,494 | 31,997 | 23,890 | 28,256 | 23,653 | 29,713 | 28,310 |
| Apr. .... | 30,228 | 24,577 | 25,177 | 10,695 | 22,118 | 30,472 | 22,547 | 25,044 | 24,746 | 27,641 | 25,808 |
| May .... | 27,333 | 19,525 | 23,716 | 11,114 | 23,643 | 33,267 | 21,740 | 21,660 | 22,269 | 23,708 | 23,437 |
| June ... | 31,349 | 16,929 | 24,401 | 9,696 | 25,093 | 33,817 | 21,274 | 20,818 | 22,348 | 23,141 | 18,842 |
| July .... | 26,677 | 16,728 | 20,456 | 10,220 | 21,609 | 32,016 | 18,947 | 19,321 | 17,074 | 18,513 | 17,364 |
| Aug. ... | 27,896 | 18,589 | 24,098 | 14,194 | 26,689 | 25,285 | 21,807 | 20,156 | 21,684 | 27,018 | 23,812 |
| Sept. ... | 27,890 | 19,025 | 23,641 | 16,208 | 28,811 | 22,285 | 22,770 | 21,462 | 22,464 | 26,349 | ..... |
| Oct. .... | 31,461 | 22,806 | 21,659 | 18,026 | 32,240 | 23,124 | 25,811 | 22,280 | 24,080 | 25,228 | ..... |
| Nov. .... | 29,232 | 21,666 | 21,731 | 18,488 | 31,748 | 23,544 | 23,441 | 21,860 | 23,061 | 25,102 | ..... |
| Dec. .... | 27,206 | 23,862 | 20,954 | 17,960 | 28,675 | 20,987 | 22,988 | 20,541 | 21,274 | 21,448 | ..... |
| Total ... | 339,724 | 263,711 | 279,500 | 175,643 | 308,563 | 332,378 | 277,736 | 271,251 | 263,232 | 298,406 | ..... |
| Aver. ... | 28,310 | 21,976 | 23,292 | 14,637 | 25,297 | 27,615 | 23,145 | 22,604 | 21,936 | 24,867 | ..... |

# Mine Production of Copper in United States

(U. S. Bureau of Mines)

(In short tons)

| | Eastern | Missouri | Western | Total |
|---|---|---|---|---|
| 1953 | | | | |
| Ttl. | 38,900 | 2,374 | 885,174 | 926,448 |
| 1954 | | | | |
| Ttl. | 40,302 | 1,925 | 793,241 | 835,472 |
| 1955 | | | | |
| Jan. | 5,054 | 175 | 78,071 | 83,300 |
| Feb. | 5,339 | 185 | 77,968 | 83,492 |
| Mar. | 6,655 | 220 | 86,894 | 93,769 |
| Apr. | 5,644 | 190 | 83,320 | 89,154 |
| May | 4,606 | 199 | 86,019 | 90,824 |
| June | 5,192 | 189 | 84,011 | 89,392 |
| July | 4,678 | 169 | 28,496 | 33,343 |
| Aug. | 5,028 | 125 | 62,082 | 67,235 |
| Sept. | 6,928 | 130 | 83,213 | 90,271 |
| Oct. | 6,552 | 195 | 85,445 | 92,192 |
| Nov. | 6,188 | 184 | 84,681 | 91,053 |
| Dec. | 6,758 | 179 | 81,638 | 88,575 |
| Ttl. | 68,622 | 2,140 | 921,838 | 992,600 |
| 1956 | | | | |
| Jan. | 6,674 | 163 | 87,682 | 94,519 |
| Feb. | 6,688 | 164 | 82,560 | 89,412 |
| Mar. | 7,347 | 198 | 90,398 | 97,943 |
| Apr. | 6,821 | 195 | 88,594 | 95,610 |
| May | 6,960 | 191 | 92,513 | 99,664 |
| June | 6,720 | 173 | 88,041 | 94,931 |
| July | 6,132 | 185 | 75,301 | 81,618 |

# Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

| | No. 1 Copper Scrap | No. 2 Copper Scrap | Light Copper Scrap | Refinery Brass* |
|---|---|---|---|---|
| 1954 | | | | |
| Av. | ..26.75 | 25.22 | 23.69 | 22.92 |
| 1955 | | | | |
| July | ..37.39 | 35.89 | 34.04 | 33.06 |
| Aug. | .39.93 | 38.43 | 36.40 | 34.24 |
| Sept. | .43.88 | 42.38 | 40.00 | 38.21 |
| Oct. | ..39.48 | 37.98 | 36.69 | 35.83 |
| Nov | ..40.08 | 38.58 | 36.33 | 36.34 |
| Dec. | ..42.75 | 41.25 | 38.79 | 38.71 |
| Av. | ..37.035 | 35.535 | 33.59 | 32.70 |
| 1956 | | | | |
| Jan. | ..42.39 | 40.89 | 38.42 | 38.26 |
| Feb. | ..43.35 | 41.85 | 39.35 | 38.65 |
| Mar. | ..45.77 | 44.27 | 41.77 | 41.02 |
| Apr. | ..41.65 | 40.15 | 37.65 | 38.15 |
| May | ..36.06 | 34.56 | 32.06 | 32.50 |
| June | ..33.32 | 31.82 | 29.32 | 29.03 |
| July | ..32.69 | 31.19 | 28.69 | 28.98 |
| Aug. | .34.269 | 32.769 | 30.269 | 30.75 |
| Sept. | .33.56 | 32.06 | 29.81 | 29.92 |

*Of dry content for material having a dry copper content in excess of 60%.

# Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)

(Cents per pound del. refinery for 60,000 lbs. of each grade)

| | No. 1 Copper Scrap | No. 2 Copper Scrap | No. 1 Composition | Heavy Yellow Brass |
|---|---|---|---|---|
| 1954 | | | | |
| Av. | ..26.59 | 25.07 | 20.99 | 16.24 |
| 1955 | | | | |
| July | ..36.83 | 35.33 | 30.15 | 22.535 |
| Aug. | .39.74 | 38.24 | 32.67 | 23.76 |
| Sept. | .43.88 | 42.38 | 35.01 | 24.96 |
| Oct. | ..39.468 | 37.968 | 32.22 | 22.80 |
| Nov. | ..40.08 | 38.58 | 33.15 | 22.53 |
| Dec. | ..43.58 | 41.22 | 34.84 | 24.22 |
| Av. | ..36.63 | 35.02 | 29.905 | 22.35 |
| 1956 | | | | |
| Jan. | ..42.39 | 40.89 | 35.22 | 24.51 |
| Feb. | ..43.35 | 41.85 | 34.72 | 24.79 |
| Mar. | ..45.77 | 44.27 | 36.46 | 27.76 |
| Apr. | ..41.65 | 40.15 | 34.40 | 24.49 |
| May | ..36.06 | 34.56 | 29.58 | 19.89 |
| June | .33.32 | 31.82 | 26.37 | 18.40 |
| July | ..32.69 | 31.19 | 26.89 | 18.43 |
| Aug. | .34.269 | 32.769 | 29.833 | 20.463 |
| Sept. | .33.26 | 32.25 | 30.07 | 20.92 |

# United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

| | Stock At Beginning | Production Primary & Secondary | Total Supply | Stock At End | Domestic Shipments |
|---|---|---|---|---|---|
| 1952 | 25,339 | 532,778 | 558,117 | 43,560 | 492,091 |
| 1953 | 43,560 | 533,883 | 577,443 | 81,152 | 488,437 |
| 1954 | | | | | |
| October | 93,358 | 51,276 | 144,634 | 95,496 | 36,307 |
| November | 95,496 | 46,711 | 142,207 | 94,387 | 34,913 |
| December | 94.387 | 46,506 | 140,893 | 92,719 | 37,017 |
| Total | ..... | 551,618 | 632,770 | ..... | 475,551 |
| 1955 | | | | | |
| January | 92,719 | 44,780 | 137,499 | 84,882 | 40,451 |
| February | 84,882 | 40,173 | 125,055 | 64,938 | 46,645 |
| March | 64,938 | 50,308 | 115,246 | 59,881 | 42,381 |
| April | 59,881 | 50,274 | 110,155 | 54,956 | 44,878 |
| May | 54,956 | 45,435 | 100,391 | 50,947 | 46,130 |
| June | 50,947 | 48,150 | 99,097 | 44,665 | 44,985 |
| July | 44,665 | 23,850 | 68,515 | 39,856 | 26,547 |
| August | 39,856 | 36,912 | 76,768 | 34,111 | 41,469 |
| September | 34,111 | 50,453 | 84,564 | 30,753 | 46,250 |
| October | 30,753 | 53,747 | 84,500 | 29,913 | 52,062 |
| November | 29,913 | 52,623 | 82,536 | 28,855 | 51,370 |
| December | 28,855 | 50,448 | 79,303 | 31,089 | 48,171 |
| Total | ..... | 547,153 | 639,872 | ..... | 531,339 |
| 1956 | | | | | |
| January | 31,089 | 51,306 | 82,395 | 32,469 | 49,746 |
| February | 32,469 | 49,475 | 81,944 | 41,450 | 39,411 |
| March | 41,450 | 54,174 | 95,624 | 52,089 | 39,344 |
| April | 53,089 | 52,976 | 105,065 | 53,958 | 44,986 |
| May | 53,958 | 47,961 | 101,919 | 50,460 | 40,703 |
| June | 50,460 | 47,367 | 97,827 | 45,951 | 41,458 |
| July | 45,951 | 48,479 | 94,430 | 49,134 | 36,483 |
| August | 49,134 | 48,404 | 97,538 | 39,304 | 48,404 |

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

# Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

| | Cable | Amm. | Foil | Batt'y | Brass Making | Sundries | Jobbers | Unclassified |
|---|---|---|---|---|---|---|---|---|
| 1950 | 66,646 | 28,854 | 3,304 | 93,297 | 6,374 | 60,118 | 10,450 | 230,594 |
| 1951 | 70,149 | 32,099 | 2,063 | 75,337 | 5,583 | 48,248 | 3,550 | 259,155 |
| 1952 | 74,616 | 30,809 | 1,374 | 77,238 | 5,160 | 50,943 | 5,671 | 246,283 |
| 1953 | | | | | | | | |
| Total | 76,283 | 34,415 | 2,136 | 80,339 | 5,716 | 55,936 | 6,390 | 227,222 |
| 1954 | | | | | | | | |
| Feb. | 6,040 | 2,170 | .... | 5,890 | 798 | 3,682 | 254 | 17,717 |
| Mar. | 7,620 | 2,405 | 252 | 6,663 | 149 | 6,818 | 492 | 23,438 |
| Apr. | 6,207 | 2,550 | 361 | 6,341 | 308 | 5,194 | 342 | 25,798 |
| May | 6,030 | 2,310 | 276 | 5,635 | 250 | 4,621 | 1,020 | 20,041 |
| June | 6,116 | 3,700 | 122 | 5,711 | 406 | 6,525 | 1,114 | 23,293 |
| July | 4,000 | 1,500 | ... | 6,690 | 415 | 4,121 | 861 | 19,608 |
| Aug. | 8,799 | 3,358 | 146 | 6,111 | 838 | 5,377 | 1,152 | 17,621 |
| Sept. | 4,602 | 1,653 | 564 | 4,110 | 20 | 4,667 | 851 | 14,424 |
| Oct. | 6,142 | 1,970 | 657 | 4,172 | 383 | 4,581 | 829 | 17,573 |
| Nov. | 5,816 | 3,795 | 333 | 3,898 | 520 | 3,202 | 721 | 16,628 |
| Dec. | 7,707 | 1,880 | 100 | 5,790 | 141 | 3,530 | 906 | 16,963 |
| Total | 75,412 | 30,246 | 2,811 | 66,088 | 5,192 | 57,369 | 9,170 | 229,264 |
| 1955 | | | | | | | | |
| Jan. | 7,044 | 1,570 | 36 | 5,158 | 213 | 4,451 | 857 | 21,122 |
| Feb. | 5,869 | 3,200 | 348 | 6,758 | 289 | 4,796 | 1,013 | 24,373 |
| Mar. | 6,538 | 2,340 | 614 | 6,897 | 240 | 3,807 | 1,167 | 20,778 |
| Apr. | 5,909 | 2,625 | 201 | 6,533 | 463 | 5,178 | 1,234 | 22,735 |
| May | 6,145 | 2,950 | 251 | 8,127 | 321 | 4,435 | 1,145 | 22,756 |
| June | 6,623 | 950 | 50 | 6,833 | 290 | 5,175 | 1,293 | 23,816 |
| July | 2,313 | 150 | 307 | 4,365 | 100 | 3,763 | 946 | 14,603 |
| Aug. | 5,772 | 2,800 | 210 | 4,794 | 290 | 3,741 | 1,230 | 22,632 |
| Sept. | 6,552 | 2,295 | 415 | 7,794 | 354 | 4,711 | 1,149 | 22,980 |
| Nov. | 6,606 | 2,433 | 70 | 13,875 | 387 | 3,795 | 874 | 23,330 |
| Dec. | 6,275 | 3,260 | 35 | 7,508 | 449 | 4,289 | 839 | 25,516 |
| Total | 72,418 | 27,599 | 2,622 | 88,461 | 3,960 | 52,994 | 13,034 | 270,251 |
| 1956 | | | | | | | | |
| Jan. | 7,777 | 3,075 | 200 | 6,555 | 290 | 8,538 | 917 | 22,394 |
| Feb. | 5,974 | 2,435 | 384 | 5,983 | 275 | 3,592 | 871 | 19,897 |
| Mar. | 6,786 | 1,300 | 101 | 4,903 | 321 | 3,915 | 1,331 | 20,687 |
| Apr. | 6,744 | 2,950 | 310 | 4,839 | 260 | 3,522 | 1,376 | 24,985 |
| May | 6,490 | 2,825 | ... | 5,027 | 131 | 3,513 | 964 | 21,753 |
| June | 8,502 | 2,150 | ... | 4,167 | 186 | 3,645 | 1,021 | 21,787 |
| July | 3,497 | 904 | ... | 5,007 | 80 | 2,859 | 1,453 | 22,683 |
| Aug. | 7,712 | 1,497 | 85 | 6,334 | 713 | 4,443 | 1,262 | 26,358 |

## Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 14.192 | 13.26 | 15.00 | 16.16 |
| Feb. | 13.50 | 12.82 | 15.00 | 16.00 |
| Mar. | 13.404 | 12.94 | 15.00 | 16.00 |
| Apr. | 12.64 | 13.91 | 15.00 | 16.00 |
| May | 12.75 | 14.00 | 15.00 | 16.00 |
| June | 13.413 | 14.11 | 15.00 | 16.00 |
| July | 13.683 | 14.00 | 15.00 | 16.00 |
| Aug. | 14.00 | 14.06 | 15.00 | 16.00 |
| Sept. | 13.74 | 14.60 | 15.12 | 16.00 |
| Oct. | 13.50 | 14.975 | 15.50 | .... |
| Nov. | 13.50 | 15.00 | 15.50 | .... |
| Dec. | 13.50 | 15.00 | 15.56 | .... |
| Av. | 13.485 | 14.06 | 15.14 | .... |

## Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices
(Cents per pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 19.192 | 18.26 | 20.00 | 21.66 |
| Feb. | 18.50 | 17.82 | 20.00 | 21.50 |
| Mar. | 18.404 | 17.94 | 20.00 | 21.50 |
| Apr. | 17.64 | 18.91 | 20.00 | 21.50 |
| May | 17.75 | 19.00 | 20.00 | 21.50 |
| June | 19.413 | 19.11 | 20.00 | 21.50 |
| July | 18.683 | 19.00 | 20.00 | 21.50 |
| Aug. | 19.00 | 19.06 | 20.00 | 21.50 |
| Sept. | 18.74 | 19.60 | 20.12 | 21.50 |
| Oct. | 18.50 | 19.975 | 20.50 | .... |
| Nov. | 18.50 | 20.00 | 20.50 | .... |
| Dec. | 18.50 | 20.00 | 20.56 | .... |

## Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers.

(In thousands of units)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 1,571 | 1,788 | 1,478 | 2,005 |
| Feb. | 1,162 | 1,422 | 1,647 | 1,305 |
| Mar. | 1,202 | 1,194 | 1,321 | 1,313 |
| Apr. | 1,245 | 1,150 | 1,281 | 1,331 |
| May | 1,455 | 1,391 | 1,572 | 1,714 |
| June | 2,004 | 1,834 | 1,794 | 1,760 |
| July | 2,528 | 2,288 | 2,024 | 2,121 |
| Aug. | 2,707 | 2,481 | 2,777 | 2,506 |
| Sept. | 2,852 | 2,728 | 3,039 | .... |
| Oct. | 2,825 | 2,667 | 3,036 | .... |
| Nov. | 2,173 | 2,410 | 2,622 | .... |
| Dec. | 1,890 | 1,796 | 2,556 | .... |
| Total | 23,614 | 23,149 | 25,147 | ..... |

# Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

| | In ore and matte and in process at smelters | — In base bullion (lead content) — At smelters & refineries | In transit to refineries | In process at refineries | Refined pig lead | Anti-monial lead | Total Stocks |
|---|---|---|---|---|---|---|---|
| 1954 | | | | | | | |
| June 1 | 64,103 | 10,906 | 1,348 | 27,105 | 97,420 | 11,882 | 212,764 |
| July 1 | 61,669 | 12,241 | 3,660 | 26,046 | 94,828 | 9,798 | 208,242 |
| Aug. 1 | 63,093 | 17,196 | 2,592 | 30,301 | 80,820 | 12,210 | 206,212 |
| Sept. 1 | 62,851 | 18,688 | 2,903 | 29,792 | 72,150 | 12,279 | 198,663 |
| Oct. 1 | 63,731 | 18,771 | 4,155 | 29,024 | 79,190 | 14,168 | 209,039 |
| Nov. 1 | 59,660 | 17,095 | 3,265 | 28,373 | 80,650 | 14,846 | 203,889 |
| Dec. 1 | 57,452 | 16,888 | 2,570 | 27,816 | 79,814 | 14,573 | 199,113 |
| 1955 | | | | | | | |
| Jan. 1 | 62,074 | 18,170 | 1,723 | 27,164 | 77,930 | 14,789 | 201,850 |
| Feb. 1 | 59,303 | 15,485 | 3,133 | 29,393 | 69,980 | 14,902 | 192,196 |
| Mar. 1 | 64,492 | 17,741 | 3,781 | 28,467 | 52,734 | 12,204 | 179,419 |
| Apr. 1 | 57,577 | 20,063 | 2,309 | 28,564 | 47,496 | 12,385 | 168,394 |
| May 1 | 59,686 | 17,468 | 3,496 | 25,373 | 43,207 | 11,749 | 160,979 |
| June 1 | 59,632 | 17,705 | 1,941 | 27,979 | 39,892 | 11,055 | 158,204 |
| July 1 | 58,182 | 14,707 | 2,941 | 30,579 | 34,432 | 10,233 | 151,074 |
| Aug. 1 | 65,476 | 10,065 | 1,303 | 26,792 | 30,077 | 9,779 | 143,492 |
| Sept. 1 | 75,057 | 17,183 | 3,744 | 29,660 | 26,859 | 7,252 | 159,755 |
| Oct. 1 | 70,628 | 19,083 | 4,217 | 28,424 | 23,292 | 7,461 | 153,105 |
| Nov. 1 | 71,257 | 20,682 | 4,276 | 28,596 | 21,828 | 8,085 | 154,724 |
| Dec. 1 | 64,109 | 20,232 | 4,377 | 27,486 | 19,592 | 9,263 | 145,059 |
| 1956 | | | | | | | |
| Jan. 1 | 71,812 | 16,532 | 3,764 | 27,625 | 21,196 | 9,893 | 150,822 |
| Feb. 1 | 70,690 | 19,082 | 1,764 | 25,632 | 24,080 | 8,389 | 149,637 |
| Mar. 1 | 71,023 | 16,406 | 2,583 | 27,519 | 32,355 | 9,095 | 158,981 |
| Apr. 1 | 72,358 | 15,655 | 2,152 | 28,065 | 41,800 | 10,289 | 170,319 |
| May 1 | 74,837 | 15,500 | 2,718 | 24,181 | 43,268 | 10,690 | 171,194 |
| June 1 | 78,987 | 15,477 | 2,475 | 26,682 | 39,558 | 10,902 | 174,081 |
| July 1 | 81,796 | 15,837 | 4,423 | 28,505 | 36,499 | 9,452 | 176,512 |
| Aug. 1 | 76,985 | 16,856 | 3,516 | 29,603 | 38,210 | 10,924 | 176,094 |
| Sept. 1 | 81,634 | 18,529 | 2,874 | 29,991 | 29,230 | 10,074 | 172,332 |

# Receipts of Lead in Ore and Scrap

## By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

| | Receipts of lead in ore: United States | Foreign | Total | Receipts of lead in scrap etc. (b) | Total receipts in ore, & scrap |
|---|---|---|---|---|---|
| 1952 Total .... | 405,990 | 98,276 | 504,266 | 41,845 | 546,111 |
| 1953 Total ..... | 351,183 | 155,788 | 506,971 | 42,994 | 549,965 |
| 1954 | | | | | |
| September ..... | 25,244 | 20,807 | 46,051 | 4,450 | 50,501 |
| October ..... | 26,884 | 12,561 | 39,455 | 5,134 | 44,579 |
| November ..... | 29,107 | 8,622 | 37,729 | 5,628 | 43,357 |
| December ..... | 29,646 | 16,020 | 45,666 | 4,457 | 50,123 |
| Total ..... | 336,291 | 158,081 | 494,372 | 49,864 | 544,236 |
| 1955 | | | | | |
| January ..... | 28,767 | 11,502 | 40,269 | 3,509 | 43,778 |
| February ..... | 27,456 | 17,400 | 44,856 | 2,738 | 47,594 |
| March ..... | 30,056 | 11,104 | 41,160 | 3,291 | 44,451 |
| April ..... | 28,707 | 16,347 | 45,054 | 3,249 | 48,303 |
| May ..... | 28,511 | 13,377 | 41,888 | 4,879 | 48,767 |
| June ..... | 28,273 | 14,667 | 42,940 | 4,509 | 47,449 |
| July ..... | 23,027 | 3,826 | 26,853 | 649 | 27,502 |
| August ..... | 30,249 | 11,859 | 42,108 | 3,942 | 46,050 |
| September ..... | 29,377 | 14,881 | 44,258 | 3,623 | 47,881 |
| October ..... | 30,073 | 20,845 | 50,918 | 5,655 | 56,573 |
| November ..... | 27,736 | 13,022 | 40,758 | 3,802 | 44,560 |
| December ..... | 29,363 | 24,136 | 53,499 | 3,150 | 56,649 |
| Total ..... | 341,595 | 172,966 | 514,561 | 42,996 | 557,557 |
| 1956 | | | | | |
| January ..... | 27,184 | 15,704 | 42,888 | 6,346 | 49,234 |
| February ..... | 28,569 | 16,528 | 45,097 | 4,577 | 49,674 |
| March ..... | 31,568 | 17,904 | 49,472 | 3,989 | 53,461 |
| April ..... | 31,786 | 15,224 | 47,010 | 4,252 | 51,262 |
| May ..... | 32,715 | 18,476 | 51,191 | 4,711 | 55,902 |
| June ..... | 31,546 | 16,251 | 47,797 | 4,541 | 52,338 |
| July ..... | 29,964 | 13,476 | 43,440 | 3,207 | 46,647 |
| August ..... | 31,112 | 20,726 | 51,838 | 5,885 | 57,723 |

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

# N. Y. Lead Price Changes

(Effective Date)

| | |
|---|---|
| 1949 | |
| Nov. 16 | 12.50 |
| Nov. 21 | 12.00 |
| 1950 | |
| Mar. 9 | 11.00 |
| Mar. 14 | 10.50 |
| Apr. 20 | 10.75 |
| Apr. 26 | 11.00 |
| May 4 | 11.25 |
| May 10 | 11.50 |
| May 11 | 12.00 |
| June 23 | 11.50 |
| 1951 | |
| June 28 | 11.00 |
| July 12 | 11.50 |
| July 13 | 12.00 |
| Aug. 15 | 13.00 |
| Aug. 21 | 14.00 |
| Sept. 1 | 15.00 |
| Sept. 8 | 16.00 |
| Oct. 2 | **19.00 |
| Oct. 31 | 17.00 |
| 1952 | |
| Apr. 29 | 18.00 |
| May 2 | 17.00 |
| May 12 | 15.00 |
| June 23 | 15.50 |
| June 24 | 16.00 |
| Oct. 7 | 15.00 |
| Oct. 14 | 14.00 |
| Oct. 22 | 13.50 |
| Nov. 3 | 14.00 |
| Nov. 10 | 14.20 |
| Nov. 11 | 14.50 |
| Nov. 20 | 14.25 |
| Nov. 24 | 14.00 |
| Dec. 22 | 14.25 |
| Dec. 29 | 14.50 |
| Dec. 31 | 14.75 |
| 1953 | |
| Jan. 7 | 14.50 |
| Jan. 12 | 14.00 |
| Feb. 2 | 13.50 |
| Mar. 4 | 13.00 |
| Mar. 10 | 13.50 |
| Apr. 7 | 13.00 |
| Apr. 16 | 12.50 |
| Apr. 21 | 12.00 |
| Apr. 29 | 12.50 |
| May 18 | 12.75 |
| May 19 | 13.00 |
| May 26 | 13.15 |
| June 11 | 13.50 |
| July 20 | 13.75 |
| July 23 | 14.00 |
| Sept. 16 | 13.50 |
| 1954 | |
| Jan. 18 | 13.00 |
| Feb. 18 | 12.50 |
| Mar. 9 | 12.75 |
| Mar. 10 | 13.00 |
| Mar. 26 | 13.25 |
| Mar. 29 | 13.50 |
| Apr. 1 | 13.75 |
| Apr. 12 | 14.00 |
| June 2 | 14.25 |
| June 15 | 14.00 |
| Aug. 25 | 14.25 |
| Sept. 7 | 14.50 |
| Sept. 15 | 14.75 |
| Oct. 4 | 14.875 |
| Oct. 5 | 15.00 |
| 1955 | |
| Oct. 23 | 15.00- 15.50 |
| Oct. 26 | 15.50 |
| Dec. 29 | 16.00 |
| 1956 | |
| Jan. 4 | 16.50 |
| Jan. 13 | 16.00 |

*OPA Ceiling. ‡Returned to OPA Ceiling.
**OPS Ceiling.

# Antimonial Lead Stocks at Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

| End of: | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 11,572 | 14,691 | 14,902 | 8,389 |
| Feb. | 10,736 | 14,798 | 12,204 | 9,095 |
| Mar. | 11,484 | 11,985 | 12,385 | 10,289 |
| Apr. | 11,248 | 11,977 | 11,740 | 10,690 |
| May | 10,764 | 11,882 | 11,055 | 10,902 |
| June | 14,335 | 9,798 | 10,233 | 9,452 |
| July | 14,247 | 12,210 | 9,779 | 10,924 |
| Aug. | 14,748 | 12,279 | 7,252 | 10,074 |
| Sept. | 15,877 | 14,168 | 7,461 | ..... |
| Oct. | 15,742 | 14,846 | 8,085 | ..... |
| Nov. | 16,498 | 14,573 | 9,263 | ..... |
| Dec. | 16,116 | 14,789 | 9,893 | ..... |

# Antimonial Lead Production by Primary Refineries

(A. B. M. S.)

(In tons of 2,000 lbs.)

| End of: | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 2,937 | 3,768 | 4,529 | 5,045 |
| Feb. | 3,682 | 4,257 | 4,777 | 5,888 |
| Mar. | 5,353 | 4,475 | 6,202 | 5,526 |
| Apr. | 5,027 | 4,470 | 5,343 | 5,818 |
| May | 6,497 | 4,373 | 4,737 | 5,405 |
| June | 9,270 | 3,796 | 4,792 | 4,456 |
| July | 5,259 | 5,991 | 1,153 | 3,853 |
| Aug. | 4,668 | 6,455 | 2,946 | 5,342 |
| Sept. | 5,509 | 5,869 | 6,650 | .... |
| Oct. | 5,100 | 5,532 | 8,016 | .... |
| Nov. | 5,400 | 5,364 | 7,985 | .... |
| Dec. | 3,060 | 5,255 | 6,907 | .... |
| Total | 61,762 | 59,875 | 64,037 | ..... |

## U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

| Metal Products: | Jan.-July 1956 | June 1956 | July 1956 |
|---|---|---|---|
| Ammunition | 27,044 | 3,972 | 3,073 |
| Bearing metals | 16,379 | 2,258 | 1,678 |
| Brass and bronze | 16,219 | 2,052 | 1,449 |
| Cable covering | 77,039 | 12,001 | 7,663 |
| Calking lead | 33,933 | 5,820 | 4,881 |
| Casting metals | 6,951 | 963 | 813 |
| Collapsible tubes | 6,500 | 624 | 436 |
| Foil | 2,358 | 387 | 276 |
| Pipes, traps and bends | 15,485 | 2,196 | 2,047 |
| Sheet lead | 18,131 | 2,594 | 2,420 |
| Solder | 41,802 | 5,529 | 5,044 |
| Storage battery grids, posts, etc. | 105,272 | 14,828 | 13,767 |
| Storage battery oxides | 98,734 | 14,195 | 12,209 |
| Terne metal | 810 | 101 | 106 |
| Type metal | 12,743 | 2,005 | 1,678 |
| Total | 479,400 | 69,525 | 57,540 |
| **Pigments:** | | | |
| White lead | 9,761 | 1,418 | 1,390 |
| Red lead and litharge | 45,496 | 6,720 | 5,236 |
| Pigment colors | 8,012 | 1,204 | 773 |
| Other* | 3,333 | 174 | 332 |
| Total | 66,602 | 9,516 | 7,731 |
| **Chemicals:** | | | |
| Tetraethyl lead | 113,847 | 16,116 | 18,050 |
| Misc. chemicals | 1,601 | 228 | 168 |
| Total | 115,448 | 16,344 | 18,218 |
| **Misc. Uses:** | | | |
| Annealing | 2,729 | 328 | 134 |
| Galvanizing | 837 | 60 | 23 |
| Lead plating | 484 | 65 | 29 |
| Weights & ballast | 3,522 | 652 | 501 |
| Total | 7,572 | 1,105 | 687 |
| **Other Uses: Unclassified** | 8,539 | 1,066 | 738 |
| **Total reported** | †677,561 | †97,556 | †84,914 |
| Estimated unreported consumption | 7,000 | 1,000 | 1,000 |
| Grand total | 684,600 | 98,600 | 85,900 |
| **Daily average‡** | 3,214 | 3,287 | 2,771 |

* Includes lead content of leaded zinc oxide production.

† Includes lead content of scrap used directly in fabricated products.

‡ Based on number of days in month without adjustment for Sundays or holidays.

## U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

| | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 25,786 | 29,062 | 31,012 |
| Feb. | 25,837 | 28,926 | 30,125 |
| Mar. | 29,442 | 33,225 | 30,099 |
| Apr. | 25,820 | 28,656 | 28,186 |
| May | 28,637 | 31,092 | 29,752 |
| June | 28,574 | 32,627 | 31,501 |
| July | 25,968 | 26,994 | 26,963 |
| Aug. | 25,671 | 26,954 | 25,077 |
| Sept. | 30,631 | 34,291 | ..... |
| Oct. | 30,123 | 34,121 | ..... |
| Nov. | 30,142 | 34,820 | ..... |
| Dec. | 28,840 | 29,689 | ..... |
| Total | 335,887 | 370,794 | ..... |

## American Antimony

Monthly Average Prices in bulk, f. o. b. Laredo

(Cents per lb. in ton lots)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 34.50 | 28.50 | 28.50 | 33.00 |
| Feb. | 34.50 | 28.50 | 28.50 | 33.00 |
| Mar. | 34.50 | 28.50 | 28.50 | 33.00 |
| Apr. | 34.50 | 28.50 | 28.50 | 33.00 |
| May | 34.50 | 28.50 | 28.50 | 33.00 |
| June | 34.50 | 28.50 | 28.50 | 33.00 |
| July | 34.50 | 28.50 | 28.50 | 33.00 |
| Aug. | 34.50 | 28.50 | 30.66 | 33.00 |
| Sept. | 34.50 | 28.50 | 33.00 | 33.00 |
| Oct. | 34.50 | 28.50 | 33.00 | .... |
| Nov. | 33.68 | 28.50 | 33.00 | .... |
| Dec. | 28.50 | 28.50 | 33.00 | .... |
| Av. | 33.93 | 28.50 | 30.18 | .... |

## Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

| | Stocks June 30, 1956 | Net Receipts in July | Consumed in July | Stocks July 31 1956 |
|---|---|---|---|---|
| Soft Lead | *64,173 | 59,011 | 55,970 | 67,214 |
| Antimonial lead | 45,210 | 20,941 | 21,253 | 44,898 |
| Lead in alloys | 8,563 | 4,399 | 3,279 | 9,683 |
| Lead in copper-base scrap | 1,667 | 1,347 | 1,114 | 1,900 |
| Total | *119,613 | 85,698 | †81,616 | 123,695 |

* Revised.

† Excludes 2,982 tons of lead which went directly from scrap to fabricated products and 316 tons of lead contained in leaded zinc oxide production.

## Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

July

| | Soft lead | Antimonial lead | Lead in alloys | Lead in copper-base scrap | Total |
|---|---|---|---|---|---|
| Metal products | 29,374 | 20,833 | 3,271 | 1,114 | 54,592 |
| Pigments | 7,404 | 11 | .... | .... | 7,415 |
| Chemicals | 18,205 | 13 | .... | .... | 18,218 |
| Miscellaneous | 307 | 346 | .... | .... | 653 |
| Unclassified | 680 | 50 | 8 | .... | 738 |
| Total | 55,970 | 21,253 | 3,279 | 1,114 | *81,616 |

* Excludes 2,982 tons of lead which went directly from scrap to fabricated products and 316 tons of lead contained in leaded zinc oxide production.

## Lead Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

| | 1956 May | 1956 June | 1956 July |
|---|---|---|---|
| **IMPORTS** | | | |
| U. S.† (s.t.) | 21,045 | 14,765 | 13,092 |
| Canada (s.t.) | 1 | ... | ... |
| Denmark | 651 | 606 | 1,458 |
| France | 6,205 | 3,554 | ... |
| Germany, W.** | 5,120 | 4,851 | ... |
| Italy†† | 1,820* | 832 | ... |
| Netherlands | 4,084 | 3,950 | ... |
| Norway | 712 | 506 | ... |
| Sweden | 1,379 | 1,262 | 1,053 |
| Switzerland | 1,369 | 1,469 | 920 |
| U. K. (l.t.) | 12,855 | 21,037 | 11,248 |
| India‡ (l.t.) | 1,189 | 1,477 | ... |
| **EXPORTS** | | | |
| U. S.† (s.t.) | ... | ... | 97 |
| Canada (s.t.) | 7,214 | 6,632 | 9,695 |
| Denmark | 172 | 17 | 317 |
| France | 654 | 351 | ... |
| Germany, W.** | 3,335 | 5,600 | ... |
| Netherlands | 665 | 1,182 | ... |
| Switzerland | ... | ... | 37 |
| Northern Rhodesia‡ (l.t.) | 1,482 | 1,181 | ... |

** Includes scrap.

†† Includes lead alloys.

‡ British Bureau of Non-Ferrous Metal Statistics.

* April-May.

† Refined.

## French Lead Imports

(American Bureau of Metal Statistics)

(In Metric Tons)

| | 1956 Jan.-July | 1956 June | 1956 July |
|---|---|---|---|
| Ore (gross weight) | 66,793 | 10,585 | 11,496 |
| Greece | 2,717 | 490 | ... |
| Italy | 787 | ... | ... |
| Algeria | 2,167 | 406 | 744 |
| Fr. Morocco | 56,118 | 9,689 | 9,752 |
| Fr. Eq. Africa | 4,031 | ... | 1,000 |
| Tunisia | 973 | ... | ... |
| Non-argentiferous | 30,298 | 3,554 | 2,784 |
| Belgium | 2,127 | 536 | 454 |
| Germany (W.) | 2,876 | 1,051 | 100 |
| U. Kingdom | 203 | ... | 203 |
| Algeria | 67 | 18 | 4 |
| Fr. Morocco | 9,557 | 10 | 19 |
| Tunisia | 15,412 | 1,938 | 2,001 |
| Other countries | 56 | 1 | 3 |
| Antimonial lead | 854 | ... | 41 |

## U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

| | 1956 Jan.-Aug. | 1956 July | 1956 Aug. |
|---|---|---|---|
| (Gross Weight) | | | |
| Lead and lead alloys | 104,223 | 11,248 | 11,583 |
| Australia | 60,859 | 6,372 | 7,133 |
| Canada | 27,807 | 3,551 | 3,350 |
| Belgium | 5,294 | 533 | 450 |
| Yugoslavia | 750 | 150 | 50 |
| United States | 951 | ... | ... |
| Peru | 4,799 | 600 | 600 |
| Other countries | 3,763 | 42 | ... |

# Domestic Zinc Statistics

**American Zinc Institute**

**Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.**

**(Tons of 2,000 lbs.)**

| | Stock Beginning | Production | Shipments: Domestic | Shipments: Export & Drawback | Shipments: Gov't Acc't | Shipments: Total | Stock at End | Unfilled Orders at End | Daily Avg. Prod. |
|---|---|---|---|---|---|---|---|---|---|
| 1950 Tl. | 94,221 | 910,354 | 849,246 | 18,189 | 128,256 | 995,691 | 8,884 | 74,795 | 2,494 |
| 1950 Mo. Avg. | | 75,863 | 70,770 | 1,516 | 10,688 | 82,974 | | | |
| 1951 Tl. | 8,884 | 931,883 | 836,800 | 32,067 | 39,949 | 918,816 | 21,901 | 50,509 | 2,553 |
| 1951 Mo. Avg. | | 77,653 | 69,733 | 3,506 | 3,329 | 76,568 | | | |
| 1952 Tl. | 21,901 | 961,430 | 803,343 | 56,202 | 36,626 | 896,171 | 87,160 | 45,264 | 2,627 |
| 1952 Mo. Avg. | | 80,119 | 66,945 | 4,683 | 3,052 | 74,681 | | | |
| 1953 | | | | | | | | | |
| Total | 180,843 | 971,191 | 818,850 | 16,326 | 42,332 | 877,508 | 180,843 | 35,466 | 2,661 |
| Monthly Avg. | | 80,933 | 68,238 | 1,361 | 3,528 | 73,126 | | | 2,661 |
| 1954 | | | | | | | | | |
| Mar. | 199,994 | 71,186 | 66,929 | 1,703 | 1,448 | 70,080 | 201,100 | 31,702 | 2,296 |
| Apr. | 201,100 | 70,255 | 67,512 | 977 | 2,489 | 70,816 | 200,740 | 31,702 | 2,342 |
| May | 200,740 | 73,645 | 61,859 | 670 | 2,037 | 64,566 | 209,828 | 38,624 | 2,376 |
| June | 209,828 | 71,466 | 72,257 | 2,297 | 5,685 | 80,239 | 201,055 | 33,100 | 2,385 |
| July | 201,124 | 70,749 | 59,167 | 1,476 | 13,214 | 73,846 | 198,027 | 38,899 | 2,282 |
| Aug. | 198,027 | 71,810 | 58,188 | 1,525 | 16,871 | 76,584 | 193,253 | 41,059 | 2,316 |
| Sept. | 193,253 | 60,137 | 64,548 | 1,072 | 12,265 | 77,885 | 175,505 | 48,818 | 2,004 |
| Oct. | 175,505 | 67,047 | 78,867 | 1,468 | 10,080 | 90,415 | 152,137 | 51,559 | 2,163 |
| Nov. | 152,137 | 80,119 | 77,074 | 2,477 | 18,066 | 97,617 | 134,639 | 44,042 | 2,671 |
| Dec. | 134,639 | 85,166 | 75,105 | 3,405 | 17,218 | 95,728 | 124,077 | 45,862 | 2,747 |
| Total | 124,277 | 868,242 | 787,922 | 27,929 | 108,957 | 924,808 | 124,077 | 45,862 | .... |
| Monthly Avg. | | 72,353 | 65,660 | 2,327 | 9,080 | 77,067 | ..... | ..... | 2,379 |
| 1955 | | | | | | | | | |
| Jan. | 124,277 | 86,076 | 70,863 | 2,644 | 19,694 | 93,201 | 117,152 | 57,421 | 2,777 |
| Feb. | 117,152 | 78,977 | 80,016 | 3,743 | 16,205 | 99,964 | 96,165 | 54,527 | 2,820 |
| Mar. | 96,165 | 89,179 | 79,720 | 1,828 | 12,959 | 94,507 | 90,837 | 60,057 | 2,877 |
| Apr. | 90,837 | 83,786 | 89,589 | 1,967 | 8,488 | 100,044 | 74,597 | 65,127 | 2,793 |
| May | 74,579 | 86,177 | 83,336 | 3,802 | 10,434 | 97,572 | 63,184 | 70,087 | 2,780 |
| June | 63,184 | 84,458 | 92,212 | 1,492 | 5,335 | 99,039 | 48,603 | 57,231 | 2,815 |
| July | 48,603 | 84,400 | 76,812 | 862 | 4,039 | 81,713 | 51,290 | 64,056 | 2,738 |
| Aug. | 51,290 | 84,874 | 87,042 | 885 | 2,153 | 90,080 | 46,084 | 73,632 | 2,738 |
| Sept. | 46,084 | 83,448 | 83,664 | 1,274 | 2,427 | 87,365 | 42,167 | 52,278 | 2,781 |
| Oct. | 42,167 | 89,449 | 85,770 | 36 | 1,942 | 87,748 | 43,868 | 61,746 | 2,886 |
| Nov. | 43,868 | 86,616 | 91,585 | 280 | 1,561 | 93,426 | 38,058 | 64,560 | 2,921 |
| Dec. | 38,058 | 92,578 | 87,010 | 684 | 1,963 | 89,657 | 40,979 | 72,908 | 2,986 |
| Total | 40,979 | 1 031,018 | 1,007,619 | 19,496 | 87,200 | 1,114,316 | 40,979 | 72,908 | .... |
| Monthly Avg. | | 85,918 | 83,968 | 1,625 | 7,267 | 92,860 | | | 2,825 |
| 1956 | | | | | | | | | |
| Jan. | 40,979 | 90,313 | 87,723 | 1,084 | 1,155 | 89,962 | 41,330 | 60,717 | 2,913 |
| Feb. | 41,330 | 86,329 | 84,727 | 317 | 2,782 | 87,826 | 39,833 | 45,255 | 2,977 |
| Mar. | 39,833 | 91,690 | 84,204 | 460 | 6,821 | 91,485 | 40,038 | 53,070 | 2,958 |
| Apr. | 40,038 | 88,664 | 74,789 | 1,437 | 4,570 | 80,795 | 47,907 | 46,106 | 2,955 |
| May | 47,907 | 81,238 | 69,085 | 287 | 10,196 | 69,568 | 59,577 | 34,003 | 2,620 |
| June | 59,577 | 78,321 | 53,048 | 539 | 15,085 | 68,672 | 69,226 | 45,921 | 2,611 |
| July | 69,226 | 83,080 | 34,219 | 811 | 14,501 | 49,531 | 102,775 | 53,559 | 2,680 |
| Aug. | 102,775 | 89,549 | 70,707 | 1,235 | 16,975 | 88,017 | 104,307 | 55,769 | 2,889 |
| Sept. | 104,307 | 90,235 | 73,142 | 934 | 18,301 | 92,377 | 102,165 | 64,450 | 3,008 |

# U. S. Consumption of Slab Zinc

**Bureau of Mines**

**By Industries (Short Tons)**

| | Galvanizers | Die Casters | Brass products | Rolled zinc | Zinc oxide & other | Total |
|---|---|---|---|---|---|---|
| 1949 Total | 348,544 | 197,387 | 84,257 | 55,100 | 17,643 | 702,931 |
| 1950 Total | 434,094 | 281,385 | 136,451 | 67,779 | 27,656 | 947,365 |
| 1951 Total | 386,373 | 266,442 | 141,456 | 64,000 | 28,738 | 887,009 |
| 1952 Total | 375,563 | 236,022 | 155,311 | 51,508 | 30,885 | 849,289 |
| 1953 Total | 403,162 | 305,346 | 177,301 | 53,784 | 38,037 | 977,636 |
| 1954 | | | | | | |
| May | 32,935 | 22,081 | 8,450 | 3,848 | 3,028 | 70,342 |
| June | 34,827 | 23,534 | 8,860 | 4,214 | 2,880 | 74,665 |
| July | 33,897 | 17,214 | 6,135 | 3,006 | 2,712 | 63,314 |
| August | 38,225 | 19,891 | 8,349 | 4,030 | 2,684 | 73,529 |
| September | 37,591 | 20,980 | 8,505 | 3,153 | 3,037 | 73,616 |
| October | 36,407 | 26,051 | 9,501 | 4,181 | 3,055 | 79,545 |
| November | 34,212 | 30,572 | 10,573 | 3,969 | 2,785 | 82,461 |
| December | 32,263 | 31,781 | 10,961 | 3,350 | 2,987 | 81,342 |
| Total | 398,599 | 286,817 | 107,293 | 45,979 | 33,342 | 876,130 |
| 1955 | | | | | | |
| January | 32,638 | 32,863 | 12,313 | 3,754 | 3,151 | 84,719 |
| February | 31,601 | 31,254 | 10,690 | 3,912 | 2,745 | 80,202 |
| March | 37,648 | 37,682 | 12,718 | 4,635 | 3,305 | 95,988 |
| April | 36,136 | 36,628 | 11,034 | 3,833 | 3,181 | 90,812 |
| May | 37,471 | 36,926 | 12,404 | 4,203 | 3,409 | 94,413 |
| June | 37,874 | 32,821 | 13,305 | 5,012 | 3,227 | 92,239 |
| July | 33,433 | 23,910 | 7,017 | 2,832 | 2,897 | 70,589 |
| August | 38,317 | 30,168 | 10,244 | 5,431 | 3,027 | 87,687 |
| September | 39,181 | 31,804 | 12,672 | 4,185 | 3,507 | 91,849 |
| October | 40,030 | 35,136 | 13,961 | 4,714 | 3,596 | 97,940 |
| November | 38,116 | 38,616 | 13,455 | 3,952 | 3,636 | 98,275 |
| December | 37,249 | 36,982 | 15,003 | 3,900 | 3,621 | 96,755 |
| Total | 439,694 | 404,790 | 144,816 | 50,363 | 39,302 | 1,081,468 |
| 1956 | | | | | | |
| January | 38,148 | 36,554 | 13,097 | 4,442 | 3,665 | 95,906 |
| February | 37,702 | 31,274 | 12,678 | 3,883 | 3,325 | 88,862 |
| March | 38,662 | 31,332 | 12,889 | 4,433 | 3,566 | 90,882 |
| April | 37,092 | 29,226 | 12,635 | 4,010 | 3,359 | 86,322 |
| May | 38,064 | 26,003 | 12,218 | 3,431 | 1,260 | 80,976 |
| June | 37,005 | 21,790 | 8,351 | 3,454 | 1,315 | 71,915 |
| July | 12,960 | 21,425 | 5,193 | 3,187 | 2,883 | 45,648 |

# Prime Western Zinc Prices

**(Cents per pound)**

**(In Tons of 2,240 Pounds)**

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 12.596 | 9.76 | 11.50 | 13.46 |
| Feb. | 11.48 | 9.375 | 11.50 | 13.50 |
| Mar. | 11.024 | 9.66 | 11.50 | 13.50 |
| Apr. | 11.00 | 10.25 | 11.93 | 13.50 |
| May | 11.00 | 10.29 | 12.00 | 13.50 |
| June | 11.00 | 10.96 | 12.25 | 13.50 |
| July | 11.00 | 11.00 | 12.50 | 13.50 |
| Aug. | 11.00 | 11.00 | 12.50 | 13.50 |
| Sept. | 10.18 | 11.44 | 12.96 | 13.50 |
| Oct. | 10.00 | 11.50 | 13.02 | .... |
| Nov. | 10.00 | 11.50 | 13.00 | .... |
| Dec. | 10.00 | 11.50 | 13.00 | .... |
| Av. | 10.857 | 10.69 | 12.305 | .... |

# High Grade Zinc Prices

**(Delivered)**

**N. Y. Monthly Averages**

**(Cents per pound)**

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 13.946 | 11.11 | 12.85 | 14.81 |
| Feb. | 12.83 | 10.725 | 12.85 | 14.85 |
| Mar. | 12.379 | 11.01 | 12.85 | 14.85 |
| Apr. | 12.35 | 11.60 | 13.28 | 14.85 |
| May | 12.35 | 11.64 | 13.35 | 14.85 |
| June | 12.35 | 12.31 | 13.60 | 14.85 |
| July | 12.47* | 12.35 | 13.85 | 14.85 |
| Aug. | 12.60 | 12.35 | 13.85 | 14.85 |
| Sept. | 11.53 | 12.79 | 14.31 | 14.85 |
| Oct. | 11.35 | 12.85 | 14.37 | .... |
| Nov. | 11.35 | 12.85 | 14.35 | .... |
| Dec. | 11.35 | 12.85 | 14.35 | .... |
| Av. | 12.207 | 12.04 | 13.655 | .... |

*East of Continental Divide.

# U. K. Zinc Consumption

**British Bureau of Non-Ferrous Metal Statistics**

**(In Tons of 2,240 Pounds)**

| | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 25,615 | 29,192 | 29,779 |
| Feb. | 25,286 | 28,814 | 29,568 |
| Mar. | 29,001 | 33,451 | 28,650 |
| Apr. | 26,084 | 27,741 | 25,348 |
| May | 27,551 | 29,237 | 27,922 |
| June | 29,665 | 31,467 | 26,650 |
| July | 23,012 | 23,695 | 23,826 |
| Aug. | 22,102 | 23,261 | 18,867 |
| Sept. | 30,413 | 30,080 | ..... |
| Oct. | 28,543 | 29,460 | ..... |
| Nov. | 27,901 | 31,516 | ..... |
| Dec. | 29,344 | 28,683 | ..... |
| Total | 324,517 | 346,597 | ..... |

## Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

| | Eastern States | Central States | Western States | Total U.S.* |
|---|---|---|---|---|
| 1952 | | | | |
| Total | 185,939 | 94,410 | 385,652 | 666,001 |
| 1953 | | | | |
| Total | 183,612 | 57,300 | 293,818 | 534,730 |
| 1954 | | | | |
| Total | 166,487 | 63,100 | 234,942 | 464,539 |
| 1955 | | | | |
| Jan. | 13,008 | 5,661 | 21,878 | 40,547 |
| Feb. | 13,124 | 5,075 | 21,437 | 39,636 |
| Mar. | 14,679 | 6,173 | 24,840 | 45,692 |
| Apr. | 13,767 | 6,074 | 23,436 | 43,277 |
| May | 13,563 | 5,842 | 25,200 | 44,605 |
| June | 13,840 | 5,652 | 24,044 | 43,536 |
| July | 13,400 | 5,340 | 22,643 | 41,383 |
| Aug. | 14,426 | 5,868 | 22,339 | 42,633 |
| Sept. | 13,830 | 5,834 | 22,490 | 42,154 |
| Oct. | 13,332 | 5,339 | 22,496 | 41,167 |
| Nov. | 12,676 | 5,532 | 21,347 | 39,555 |
| Dec. | 12,644 | 5,250 | 21,721 | 39,615 |
| Total | 162,289 | 67,640 | 273,871 | 503,800 |
| 1956 | | | | |
| Jan. | 13,830 | 5,017 | 21,701 | 40,548 |
| Feb. | 13,975 | 5,236 | 23,460 | 42,671 |
| Mar. | 15,058 | 5,740 | 27,310 | 48,108 |
| Apr. | 14,172 | 5,098 | 25,687 | 44,957 |
| May | 14,834 | 5,471 | 27,133 | 47,438 |
| June | 13,730 | 5,228 | 26,108 | 45,066 |
| July | 13,028 | 5,371 | 25,108 | 43,507 |
| Aug. | 14,559 | 5,801 | 25,950 | 46,310 |

*Includes Alaskan output in some months.

## Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

| | Eastern States | Central States | Western States | Total U.S.* |
|---|---|---|---|---|
| 1951 | | | | |
| Ttl. | 7,426 | 152,258 | 230,723 | 390,428 |
| 1952 | | | | |
| Ttl. | 11,252 | 150,302 | 228,607 | 390,161 |
| 1953 | | | | |
| Ttl. | 9,970 | 136,650 | 188,776 | 335,412 |
| 1954 | | | | |
| Ttl. | 8,608 | 138,940 | 169,804 | 317,352 |
| 1955 | | | | |
| Feb. | 792 | 12,077 | 14,558 | 27,427 |
| Mar. | 887 | 13,187 | 17,241 | 31,315 |
| Apr. | 940 | 12,417 | 15,329 | 28,686 |
| May | 987 | 12,037 | 15,908 | 28,932 |
| June | 900 | 11,918 | 15,609 | 28,427 |
| July | 828 | 10,925 | 14,030 | 25,783 |
| Aug. | 821 | 12,109 | 13,883 | 26,813 |
| Sept. | 906 | 11,676 | 14,294 | 26,876 |
| Oct. | 924 | 11,635 | 15,005 | 27,564 |
| Nov. | 762 | 11,731 | 13,482 | 25,975 |
| Dec. | 771 | 13,628 | 13,403 | 27,802 |
| Ttl. | 10,379 | 145,640 | 177,409 | 333,409 |
| 1956 | | | | |
| Jan. | 780 | 11,633 | 14,113 | 26,526 |
| Feb. | 1,006 | 12,100 | 14,648 | 27,754 |
| Mar. | 1,152 | 13,232 | 16,667 | 31,051 |
| Apr. | 978 | 11,948 | 16,699 | 29,625 |
| May | 991 | 12,497 | 16,360 | 29,848 |
| June | 862 | 11,492 | 16,909 | 29,263 |
| July | 719 | 11,459 | 15,781 | 27,959 |
| Aug. | 829 | 12,859 | 15,701 | 29,389 |

*Includes Alaskan output in some months.

## Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

| | Eastern *States | Missouri | Western States | Alaska* | Total |
|---|---|---|---|---|---|
| 1953 Total | 158,707 | 223,500 | 36,354,685 | 39,111 | 36,776,003 |
| 1954 Total | 142,180 | 283,600 | 36,121,368 | 35,140 | 36,582,288 |
| 1955 | | | | | |
| May | 13,086 | 35,539 | 3,381,060 | 1,062 | 3,430,747 |
| June | 13,592 | 35,350 | 3,033,664 | 2,591 | 3,085,197 |
| July | 9,997 | 32,910 | 2,331,064 | 5,098 | 2,379,069 |
| August | 12,360 | 38,100 | 2,723,552 | 5,477 | 2,779,489 |
| September | 11,517 | 37,180 | 2,927,151 | 6,954 | 2,982,802 |
| October | 15,152 | 35,540 | 3,145,297 | 6,704 | 3,202,693 |
| November | 12,476 | 36,040 | 2,963,360 | 4,735 | 3,016,611 |
| December | 11,831 | 37,556 | 2,849,045 | 750 | 2,899,182 |
| Total | 159,038 | 438,000 | 36,103,723 | 33,804 | 36,734,565 |
| 1956 | | | | | |
| January | 4,664 | 30,880 | 2,869,878 | 316 | 2,911,551 |
| February | 12,252 | 32,430 | 2,967,837 | 82 | 3,012,601 |
| March | 16,536 | 34,370 | 3,243,598 | 11 | 3,294,515 |
| April | 6,918 | 32,050 | 3,212,308 | 61 | 3,251,337 |
| May | 13,870 | 33,300 | 3,081,054 | 545 | 3,128,769 |
| June | 11,758 | 30,610 | 3,103,654 | 524 | 3,147,546 |
| July | 17,069 | 31,160 | 2,843,221 | 4,116 | 2,895,566 |

*Alaska totals based on mint and smelter receipts.
**Includes a total of 3,708 oz. from Illinois.

## Production of Primary Aluminum in the U. S.*

(U. S. Bureau of Mines)

(In short tons)

| | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|---|---|---|---|
| Jan. | 54,536 | 50,023 | 67,954 | 76,934 | 89,895 | 116,247 | 128,203 | 140,394 |
| Feb. | 49,749 | 54,493 | 62,740 | 72,374 | 92,649 | 110,483 | 116,236 | 132,762 |
| Mar. | 54,852 | 58,747 | 70,022 | 77,069 | 104,460 | 122,339 | 130,272 | 145,895 |
| Apr. | 54,076 | 58,024 | 67,701 | 76,880 | 102,071 | 120,434 | 126,394 | 144,726 |
| May | 56,909 | 51,929 | 67,720 | 80,803 | 105,464 | 125,138 | 131,128 | 150,800 |
| June | 54,184 | 60,400 | 67,454 | 77,476 | 104,152 | 120,758 | 127,634 | 145,726 |
| July | 55,777 | 63,518 | 72,698 | 78,368 | 109,285 | 126,161 | 132,669 | 151,624 |
| Aug. | 52,001 | 63,006 | 73,816 | 85,175 | 110,545 | 125,296 | 133,551 | 92,406 |
| Sept. | 49,742 | 54,449 | 69,429 | 76,882 | 109,333 | 120,332 | 130,606 | ..... |
| Oct. | 45,790 | 62,915 | 72,647 | 77,312 | 108,219 | 125,089 | 134,655 | ..... |
| Nov. | 35,865 | 62,276 | 72,246 | 74,639 | 105,636 | 121,252 | 133,689 | ..... |
| Dec. | 34,161 | 65,897 | 72,454 | 83,419 | 110,291 | 127,056 | 140,748 | ..... |
| Total | 603,462 | 718,622 | 836,881 | 937,330 | 1,252,013 | 1,460,565 | 1,565,721 | ..... |

*Based on producers' reports to War Production Board to July, 1946. Thereafter to Bureau of Mines. The monthly figures are preliminary in nature and will not add to the totals derived from the Bureau's annual industry canvass.

## Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

| | Eastern States | Western States | Alaska* | Total |
|---|---|---|---|---|
| 1952 | | | | |
| Ttl. | 1,948 | 1,650,660 | 233,428 | 1,886,036 |
| 1953 | | | | |
| Ttl | 1,529 | 1,689,668 | 273,479 | 1,964,676 |
| 1954 | | | | |
| Ttl. | 1,731 | 1,577,216 | 252,794 | 1,831,741 |
| 1955 | | | | |
| Mar. | 203 | 147,862 | 2,674 | 150,739 |
| Apr. | 162 | 145,103 | 15 | 145,280 |
| May | 144 | 147,595 | 7,287 | 155,026 |
| June | 156 | 139,993 | 20,668 | 160,817 |
| July | 140 | 92,322 | 39,661 | 132,123 |
| Aug. | 171 | 119,327 | 40,931 | 160,429 |
| Sept. | 170 | 139,811 | 52,153 | 192,134 |
| Oct. | 182 | 140,812 | 43,486 | 184,480 |
| Nov. | 168 | 144,837 | 35,530 | 180,535 |
| Dec. | 166 | 143,827 | 5,000 | 148,993 |
| Ttl. | 2,026 | 1,634,625 | 247,535 | 1,884,186 |
| 1956 | | | | |
| Jan. | 121 | 132,919 | 1,977 | 135,017 |
| Feb. | 154 | 130,264 | 866 | 131,284 |
| Mar. | 198 | 134,331 | 62 | 134,591 |
| Apr. | 156 | 136,360 | 522 | 137,038 |
| May | 175 | 141,319 | 4,130 | 145,624 |
| June | 199 | 139,544 | 12,312 | 152,055 |
| July | 45 | 124,736 | 31,515 | 156,296 |

*Alaska totals based on mint and smelter receipts.

## U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

| | Dom.† | For. | Total |
|---|---|---|---|
| 1952 Total | 40,245 | 36,653 | 76,898 |
| 1953 Total | 34,697 | 37,764 | 72,461 |
| 1954 | | | |
| Total | 38,059 | 39,422 | 77,481 |
| 1955 | | | |
| February | 2,753 | 2,851 | 5,604 |
| March | 3,560 | 2,780 | 6,340 |
| Apr. | 3,068 | 2,896 | 5,964 |
| May | 3,075 | 2,224 | 5,299 |
| June | 3,089 | 3,134 | 6,223 |
| July | 596 | 930 | 1,526 |
| August | 2,005 | 1,669 | 3,674 |
| September | 2,840 | 2,855 | 5,695 |
| October | 2,432 | 3,889 | 6,321 |
| November | 3,087 | 2,775 | 5,862 |
| December | 3,180 | 3,652 | 6,832 |
| Total | 33,101 | 32,780 | 65,881 |
| 1956 | | | |
| January | 3,249 | 4,159 | 7,408 |
| February | 3,615 | 4,033 | 7,648 |
| March | 3,790 | 3,550 | 7,340 |
| April | 2,898 | 3,191 | 6,089 |
| May | 2,905 | 3,709 | 6,614 |
| June | 2,501 | 2,248 | 4,749 |
| July | 3,828 | 2,838 | 6,666 |
| August | 3,035 | 3,818 | 6,853 |

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.
† Includes purchases of crude silver by the U. S. Mint.

## Average Silver Prices

(Cents per fine ounce)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 84.44 | 85.25 | 85.25 | 90.357 |
| Feb. | 85.25 | 85.25 | 85.25 | 90.90 |
| Mar. | 85.25 | 85.25 | 85.25 | 91.138 |
| Apr. | 85.25 | 85.25 | 87.08 | 90.875 |
| May | 85.25 | 85.25 | 88.928 | 90.75 |
| June | 85.25 | 85.25 | 89.71 | 90.46 |
| July | 82.25 | 82.25 | 90.49 | 90.14 |
| Aug. | 85.25 | 85.25 | 90.75 | 90.614 |
| Sept. | 85.25 | 85.25 | 90.795 | 90.75 |
| Oct. | 85.25 | 85.25 | 91.794 | .... |
| Nov. | 85.25 | 85.25 | 91.46 | .... |
| Dec. | 85.25 | 85.25 | 90.45 | .... |
| Ave. | 85.183 | 85.25 | 89.116 | .... |

Note — The averages are based on the price of refined bullion imported on or after August 31, 1942.

## U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Ore, matte & reg. (cont.) | 86,244 | 10,982 | 17,755 |
| Canada | 18,251 | 3,976 | 4,131 |
| Mexico | 8,344 | 805 | 813 |
| Cuba | 10,489 | 95 | 2,131 |
| Bolivia | 2,421 | 828 | 145 |
| Chile | 12,768 | 2,104 | 1,317 |
| Peru | 8,087 | 1,538 | 302 |
| Cyprus | 4,655 | ... | 2,482 |
| Philippines | 8,737 | 820 | 2,600 |
| U. of S. Africa | 11,173 | 478 | 3,408 |
| Australia | 973 | 303 | 192 |
| Other countries | 346 | 35 | 234 |
| Blister copper (content) | 159,416 | 21,003 | 22,391 |
| Canada | 1,038 | ... | ... |
| Mexico | 26,404 | 3,844 | 3,259 |
| Chile | 95,283 | 11,575 | 15,371 |
| Peru | 6,415 | 1,482 | 782 |
| Belg. Congo | 4,346 | 543 | ... |
| N. Rhodesia | 10,856 | 560 | 1,120 |
| U. of S. Africa | 2,388 | 555 | 1,000 |
| Turkey | 3,271 | ... | ... |
| Australia | 9,415 | 2,444 | 859 |
| Refined cathodes and shapes | 132,603 | 16,782 | 17,373 |
| Canada | 57,961 | 8,840 | 8,384 |
| Mexico | 2,173 | ... | 331 |
| Chile | 31,107 | 3,298 | 2,649 |
| Peru | 14,329 | 1,651 | 1,851 |
| Belgium | 769 | ... | 218 |
| Germany (W.) | 2,738 | ... | ... |
| Norway | 4,500 | 700 | 200 |
| Sweden | 224 | ... | ... |
| U. Kingdom | 3,293 | 56 | ... |
| Yugoslavia | 138 | ... | ... |
| Belg. Congo | 4,530 | 593 | 940 |
| N. Rhodesia | 10,041 | 1,644 | 2,800 |
| Japan | 800 | ... | ... |
| **Total Imports:** | | | |
| Crude and ref. | 378,263 | 48,767 | 57,519 |
| In rolls, sheets or rods | 6,149 | 643 | 265 |
| Old and scrap (content) | 3,822 | 246 | 191 |
| Composition metal (cont.) | 38 | 3 | ... |
| Brass scrap & old (cu. cont.) | 3,459 | 311 | 268 |

## U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Ore, conc. (cont.) | 1 | ... | ... |
| Slabs, blocks, etc. | 5,702 | 629 | 602 |
| Canada | 3 | 3 | ... |
| Mexico | 400 | 110 | ... |
| Cuba | 59 | ... | 5 |
| Brazil | 32 | ... | ... |
| Chile | 96 | ... | 58 |
| Belgium | 840 | 112 | 168 |
| Germany (W.) | 112 | ... | ... |
| Netherlands | 14 | ... | ... |
| U. Kingdom | 3,696 | 336 | 336 |
| Korea | 411 | 63 | 31 |
| India | 2 | ... | 2 |
| Other countries | 37 | 5 | 2 |
| Scrap: Ashes, dross & skim. | 10,671 | 591 | 345 |
| Rolled in sheets, plates & strips | 3,575* | 143 | 317 |
| Alloys ex brass and bronze | ... | 42 | 14 |
| Die castings | ... | 76 | 86 |
| Battery shells & parts, unassembled | ... | 25 | 69 |
| Chromite zinc sheets, mold, castings, pattern plates, forms, n.e.s. | ... | 48 | 5 |

## U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Ore, conc., matte and other unref. (cont.) | 2,397 | 664 | ... |
| Refined ingots, bars, etc.† | 121,298 | 9,251 | 18,167 |
| Canada | 2,002 | 50 | 148 |
| Brazil | 4,553 | 690 | 666 |
| Austria | 168 | ... | ... |
| Belgium | 34 | ... | ... |
| Denmark | 5 | 5 | ... |
| France | 44,709 | 1,928 | 6,474 |
| Germany (W.) | 19,331 | 1,801 | 1,625 |
| Italy | 11,759 | 1,779 | 2,154 |
| Netherlands | 3,695 | ... | 336 |
| Norway | 1,415 | ... | 15 |
| Sweden | 766 | 173 | 173 |
| Switzerland | 8,631 | ... | 950 |
| U. Kingdom | 4,213 | 597 | 968 |
| Formosa | 967 | ... | 772 |
| India | 7,242 | 616 | 866 |
| Japan | 11,174 | 1,565 | 3,002 |
| Other countries | 634 | 47 | 18 |
| **Total Exports:** | | | |
| Crude and refined | 123,695 | 9,915 | 18,167 |
| Pipes & tubes* | 1,846 | 259 | 209 |
| Wire, bare | 7,537 | 728 | 448 |
| Building wire and cable‡ | 2,477 | 270 | 158 |
| Weatherproof wire‡ | 616 | 71 | 110 |
| Insulated copper wire n.e.s.‡ | 9,914 | 1,224 | 890 |

† Includes exports of refined copper resulting from scrap that was reprocessed on toll for account of the shipper.
‡ Gross weight; n.e.s.—not elsewhere specified.
* Includes plates, sheets, rods, brush copper, castings, rolls, segments (finished forms) n.e.s.

## U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Copper scrap, unalloyed† (new and old) | 14,245 | 1,436 | 1,583 |
| Canada | 3,271 | 6 | ... |
| Belgium | 176 | 27 | ... |
| Germany (W.) | 4,725 | 572 | 376 |
| Netherlands | 187 | 64 | 28 |
| Switzerland | 232 | ... | 55 |
| India | 60 | 22 | 22 |
| Japan | 5,525 | 745 | 1,102 |
| Other countries | 69 | ... | ... |
| Copper-base scrap, alloyed‡ (new and old) | 31,896 | 5,309 | 3,872 |
| Canada | 410 | 25 | 42 |
| Mexico | 2 | ... | 2 |
| Austria | 291 | ... | ... |
| Belgium | 84 | ... | 84 |
| Germany (W.) | 13,091 | 2,343 | 1,121 |
| Italy | 2,877 | 739 | 655 |
| Netherlands | 495 | 73 | 49 |
| Spain | 72 | 27 | 45 |
| Switzerland | 225 | 112 | 28 |
| U. Kingdom | 372 | 11 | 5 |
| India | 1,517 | 461 | 449 |
| Japan | 12,263 | 1,509 | 1,343 |
| Other countries | 197 | 9 | 49 |

† Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.
‡ Copper-base alloys, including brass and bronze —Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

## U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Ore, matte, etc. (cont.) | 136,932 | 15,868 | 20,590 |
| Canada | 23,798 | 2,996 | 2,976 |
| Mexico | 2,453 | 488 | 292 |
| Guatemala | 4,781 | 784 | 230 |
| Honduras | 2,045 | 374 | 340 |
| Bolivia | 12,118 | 2,060 | 1,541 |
| Chile | 76 | ... | 55 |
| Colombia | 625 | ... | 255 |
| Peru | 40,718 | 4,102 | 4,609 |
| U. of S. Africa | 30,937 | 1,238 | 9,477 |
| Australia | 17,396 | 3,613 | 569 |
| Philippines | 1,441 | 163 | 150 |
| Korea | 367 | 50 | 65 |
| Other countries | 177 | ... | 31 |
| Pigs and bars | 149,278 | 13,092 | 15,674 |
| Canada | 9,997 | 932 | 1,036 |
| Mexico | 42,694 | 3,534 | 5,079 |
| Peru | 20,582 | 2,850 | 1,802 |
| Belgium | 1,096 | 176 | ... |
| Denmark | 1,111 | 114 | 228 |
| Germany | 168 | ... | ... |
| Spain | 3,939 | 1,102 | ... |
| U. Kingdom | 115 | ... | ... |
| Yugoslavia | 26,389 | 55 | 3,572 |
| Fr. Morocco | 5,626 | ... | ... |
| Australia | 37,340 | 4,329 | 3,957 |
| Other countries | 221 | ... | ... |
| **Total Imports:** | | | |
| Ore, base bullion, ref. | 286,210 | 28,960 | 36,264 |
| Lead, scrap, dross, etc. (cont.) | 18,632 | 684 | 681 |
| Antimonial lead & typemetal | 7,419 | 391 | 1,307 |
| Lead content thereof | 6,617 | 288 | 1,148 |

## U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)
(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| Zinc ore (content) | 355,425 | 41,955 | 50,462 |
| Canada | 119,732 | 14,055 | 18,496 |
| Mexico | 128,841 | 15,708 | 20,232 |
| Cuba | 793 | 60 | 145 |
| Guatemala | 8,371 | 1,675 | 756 |
| Honduras | 1,759 | 126 | 349 |
| Bolivia | 5,507 | 1,322 | 80 |
| Colombia | 68 | ... | 29 |
| Chile | 77 | ... | 8 |
| Peru | 68,488 | 5,786 | 8,476 |
| U. of S. Africa | 4,103 | 182 | 1,465 |
| Australia | 15,676 | 3,013 | 18 |
| Philippines | 402 | 24 | 19 |
| Other countries | 1,608 | 4 | 389 |
| Zinc blocks, pigs, etc. | 113,770 | 12,631 | 14,179 |
| Canada | 60,769 | 6,407 | 7,938 |
| Mexico | 9,338 | 1,620 | 830 |
| Peru | 4,313 | 600 | 430 |
| Austria | 1,849 | ... | ... |
| Belgium | 14,805 | 1,572 | 2,025 |
| Germany (W.) | 2,547 | 335 | 723 |
| Italy | 5,063 | 358 | 1,864 |
| Netherlands | 660 | 112 | ... |
| U. Kingdom | 500 | ... | ... |
| Belg. Congo | 9,293 | 507 | 369 |
| Australia | 3,360 | 1,120 | ... |
| Japan | 1,273 | ... | ... |

## Comparative Metal Prices

| | Av. 1939 | OPA 1946 | 1956 Oct. 18 |
|---|---|---|---|
| Copper, Domestic (Electro, Del. Valley) | .11.20 | 14.375 | 37.00-40.00 |
| Lead (N. Y.) | 5.05 | 8.25 | 16.00 |
| P. W. Zinc (E. St. Louis, f. o. b. | 5.05 | 5.05 | 13.50 |
| New York, del. | .... | .... | 14.00 |
| Tin, Spot Straits, N. Y. | .... | .... | 106.75 |
| Aluminum Ingot 99%+ | .20.00 | 15.00 | 27.10 |
| Antimony (R.M.M. brand, f. o. b. Laredo) | ....12.36 | 14.50 | 33.00 |

# World Production of Copper

## (American Bureau of Metal Statistics)

### (In Tons of 2,000 Pounds)

| | United States (a) | Canada (b) | Mexico (crude) (c) | Chile (d) | Peru (d) | Fed. Rep. of Germany (e) | Norway (f) | United Kingdom (g-h) | Yugoslavia (c) | India (f-h) | Japan (e) | Turkey (f) | Australia (c) | Northern Rhodesia (c) | Union of South Africa (d) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1951** | | | | | | | | | | | | | | | |
| **Total** | 964,589 | 269,971 | 60,511 | 396,937 | 25,495 | 234,647 | ..... | ..... | ..... | .... | 100,254 | .... | 16,984 | 349,667 | 36,104 |
| **1952** | | | | | | | | | | | | | | | |
| **Total** | 961,886 | 258,868 | 60,874 | 422,493 | 22,640 | 206,747 | 11,206 | 163,968 | 36,176 | 7,009 | 104,060 | 2,546 | 21,119 | 336,883 | 37,459 |
| **1953** | | | | | | | | | | | | | | | |
| **Total** | 957,318 | 253,652 | 63,380 | 371,742 | 25,803 | 232,330 | 13,306 | 108,604 | 34,381 | 5,709 | 100,381 | 25,641 | 37,080 | 382,884 | 38,341 |
| **1954** | | | | | | | | | | | | | | | |
| **Total** | 863,721 | 302,984 | 59,030 | 372,814 | 29,233 | 258,259 | 14.205 | 152,858 | 33,394 | 8,274 | 117,371 | 27,727 | 42,241 | 386,577 | 43,153 |
| **1955** | | | | | | | | | | | | | | | |
| **Apr.** | 93,669 | 25,202 | 4,946 | 38,510 | 2,434 | 24,951 | 1,297 | 8,355 | 2,252 | 740 | 10,906 | 1,335 | 4,114 | 33,467 | 4,468 |
| **May** | 95,042 | 25,718 | 4,677 | 38,735 | 2,616 | 24,642 | 1,236 | 11,772 | 2,487 | 743 | 8,096 | 1,953 | 4,501 | 35,301 | 4,639 |
| **June** | 90,645 | 27,465 | 5,402 | 38,164 | 2,635 | 23,639 | 1,433 | 14,837 | 3,045 | 718 | 5,655 | 2,252 | 4,308 | 35,166 | 2,700 |
| **July** | 31,846 | 26,481 | 5,425 | 35,081 | 2,738 | 23,841 | 1,228 | 9,418 | 3,200 | 717 | 10,810 | 2,305 | 4,300 | 34,306 | 4,548 |
| **Aug.** | 67,990 | 27,844 | 4,829 | 36,949 | 2,613 | 24,944 | 1,231 | 10,946 | 2,976 | 763 | 11,623 | 1,623 | 4,760 | 28,942 | 4,737 |
| **Sept.** | 96,343 | 27,502 | 4.745 | 30,914 | 2,544 | 24,096 | 1,479 | 11,396 | 2,793 | 682 | 11,657 | .... | .... | 33,087 | 4,411 |
| **Oct.** | 99,514 | 27,783 | 5,816 | 37,427 | 2,055 | 23,317 | 1,439 | 10,806 | 2,151 | 694 | 11,543 | 2,552 | 3,770 | 36,149 | 4,368 |
| **Nov.** | 94,287 | 27,392 | 5,999 | 40,699 | 2,554 | 24,143 | 1,308 | 12,728 | 2,544 | 782 | 11,868 | 3,010 | 4,826 | 28,749 | 3,844 |
| **Dec.** | 93,186 | 32,850 | 5,501 | 19,232 | 2,610 | 22,973 | 1,010 | 13,871 | 2,794 | 814 | 11,872 | 2,301 | 1,804 | 31,676 | 4,068 |
| **1956** | | | | | | | | | | | | | | | |
| **Jan.** | 96,732 | 30,063 | 6,040 | 30,475 | 593 | 23,826 | 1,329 | 14,597 | 2,436 | 456 | 11,133 | 1,893 | 3,985 | 32,887 | 3,808 |
| **Feb.** | 89,326 | 26,867 | 4,965 | 37,420 | 2,492 | 21,106 | 1,259 | 11,437 | 1,872 | 792 | 11,029 | 2,477 | 4,331 | 33,545 | 2,924 |
| **Mar.** | 102,459 | 31,659 | 7,107 | 38,356 | 2,500 | 23,838 | 1,322 | 12,281 | 2,313 | 821 | 10,390 | 3,074 | 5,991 | 32,535 | 3,773 |
| **Apr.** | 98,578 | 27,804 | 6,436 | 39,731 | 2,474 | 22,593 | 1,402 | 8,154 | 1,660 | 761 | 9,927 | 2,355 | 5,443 | 30,789 | 3,105 |
| **May** | 101,422 | 29,422 | 5,801 | 39,954 | 2,612 | 23,134 | 1,415 | 10,217 | 3,103 | 755 | 11,923 | .... | 4,477 | 33,577 | 4,835 |
| **June** | 98,496 | 28,752 | 5,614 | 36,812 | 2,412 | 23,920 | .... | 9,715 | 3,018 | 587 | 12,490 | .... | 4,461 | 33,640 | 4,461 |
| **July** | 84,787 | 28,753 | 5,109 | 40,880 | 2,602 | 24,383 | .... | 12,223 | .... | 740 | 12,570 | .... | ..... | 33,279 | .... |
| **Aug.** | 90,858 | ..... | ..... | ..... | 2,523 | ..... | .... | ..... | ..... | ..... | ..... | ..... | ..... | 33,720 | .... |

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake". Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, ect., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. *Refined.

# World Production of Refined Lead

## (American Bureau of Metal Statistics)

### (In Tons of 2,000 Pounds)

| | United States | Canada | Mexico | Peru | Belgium | France | Fed. Rep. of Germany | Italy | Spain | Yugoslavia | Japan | Australia (a) | French Morocco | Tunisia | Rhodesia | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1951** | | | | | | | | | | | | | | | | |
| **Total** | 486,874 | 162,712 | 219,352 | 48,824 | 77,873 | 53,831 | 170,766 | 39,683 | 45,460 | ..... | 18,516 | 217,301 | 20,287 | 25,476 | 15,646 | 1,602,601 |
| **1952** | | | | | | | | | | | | | | | | |
| **Total** | 532,778 | 183,389 | 248,551 | 53,536 | 83,139 | 59,607 | 152,751 | 38,504 | 46,060 | 74,053 | 20,382 | 217,293 | 31,224 | 28,264 | 14,112 | 1,783,643 |
| **1953** | | | | | | | | | | | | | | | | |
| **Total** | 533,883 | 166,356 | 225,075 | 66,520 | 84,162 | 60,987 | 164,077 | 40,786 | 53,799 | 78,038 | 25,513 | 241,419 | 29,970 | 30,397 | 12,891 | 1,813,773 |
| **1954** | | | | | | | | | | | | | | | | |
| **Total** | 551,618 | 166,379 | 231,595 | 63,735 | 79,260 | 71,033 | 162.773 | 41,150 | 62,475 | 73,555 | 37,612 | 260,424 | 29,417 | 30,015 | 16,800 | 1,877,841 |
| **1955** | | | | | | | | | | | | | | | | |
| **May** | 45,435 | 13,886 | 21,340 | 5,364 | 6,642 | 7,601 | 13,676 | 3,200 | 6,254 | 6,334 | 2,314 | 26,531 | 2,025 | 1,192 | 1,792 | 163,586 |
| **June** | 48,133 | 14,061 | 18,189 | 5,442 | 6,249 | 7,068 | 11,363 | 3,169 | 5,929 | 7,288 | 2,087 | 21,427 | 4,957 | 1.903 | 1,680 | 158,678 |
| **July** | 23,850 | 7,237 | 17.255 | 5,598 | 7,120 | 3,108 | 10,077 | 4,117 | 4,844 | 7,758 | 3,724 | 15,930 | 3,746 | 2.231 | 1,680 | 118,347 |
| **Aug.** | 36,912 | 11,492 | 19,301 | 6,529 | 7,638 | 4,826 | 10.345 | 2,579 | 4,357 | 7,047 | 3,860 | 23,682 | 2,976 | 2,541 | 1,680 | 144,655 |
| **Sept.** | 50,453 | 14.323 | 18,382 | 5,323 | 9,032 | 6,558 | 13,910 | 3,805 | 6,421 | 5,687 | 3,851 | 25,833 | 3,236 | 2,706 | 1,680 | 171,200 |
| **Oct.** | 53,747 | 15,326 | 17.225 | 6,760 | 8,777 | 7,044 | 15,387 | 4,828 | 5,709 | 6,260 | 3,579 | 21,946 | .... | 1,944 | 1,568 | 169,100 |
| **Nov.** | 52.623 | 12,587 | 17,576 | 5,473 | 8,468 | 5,891 | 17,503 | 3.741 | 6,133 | 7,799 | 3,785 | 18,820 | .... | 2,535 | 1,456 | 164,390 |
| **Dec.** | 50,448 | 12,553 | 18,637 | 7,038 | 8,030 | 6,730 | 16,806 | 4,031 | 5,267 | 7,208 | 3,946 | 21,113 | 1,414 | 3,790 | 1,456 | 168,467 |
| **1956** | | | | | | | | | | | | | | | | |
| **Jan.** | 51,306 | 12.179 | 17,587 | 1,730 | 8,731 | 7,014 | 16,218 | 3,722 | 5,399 | 6,210 | 3,929 | 24,196 | 4,967 | 2,070 | 1,456 | 167,374 |
| **Feb.** | 49,475 | 11,469 | 16,510 | 6,497 | 9,446 | 6,241 | 15,743 | 3,688 | 5,202 | 4,708 | 4,239 | 16,392 | 4,572 | 1,307 | 1,232 | 157,173 |
| **Mar.** | 54,174 | 12,438 | 17,376 | 6,142 | 9,338 | 6,383 | 14,562 | 3,164 | 5,319 | 7,187 | 4,009 | 19,535 | 3,505 | 2,500 | 1,680 | 167,740 |
| **Apr.** | 52,976 | 11,354 | 15,186 | 6,790 | 8,650 | 6,276 | 14,398 | 3,799 | 6,118 | 7,159 | 4,136 | 17,407 | 2,056 | 2,273 | 1,456 | 161,359 |
| **May** | 47,961 | 11,990 | 17,611 | 6,970 | 9,188 | 6,814 | 14,022 | 4,511 | 5,660 | 5,786 | 4,142 | 15,984 | 798 | 2,372 | 1,456 | 156,331 |
| **June** | 47,367 | ..... | 18,091 | 6,779 | 9,481 | 6,704 | 14,302 | 3,100 | 4,767 | 7,286 | 3,972 | 19,664 | .... | 2,064 | 1,456 | ..... |
| **July** | 48,479 | ..... | 18,515 | 6,415 | .... | .... | 12,165 | 3,887 | 5,195 | .... | 4,183 | ..... | .... | .... | 1,456 | ..... |
| **Aug.** | 48,404 | ..... | 18,890 | 6,192 | .... | ..... | ..... | .... | .... | .... | ... | ..... | .... | .... | 1,400 | ..... |

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

# World Production of Slab Zinc

## (American Bureau of Metal Statistics)

### (In Tons of 2,000 Pounds)

| | United States (a) | Can. (b) | Mexico | Peru (b-c) | Belgium | France (a) | Fed. Rep. of Germany | Great Britain | Italy | Netherlands | Norway (b) | Spain | Yugoslavia | Japan (a) | Australia (b) | Rhodesia (b) | Total (d) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1951** | | | | | | | | | | | | | | | | | |
| **Total** | 931,833 | 218,548 | 57,990 | 1,003 | 220,479 | 82,184 | 155,024 | 78,101 | 52,053 | 24,924 | 44,971 | 23,444 | .... | 62,109 | 88,103 | 25,301 | 2,065,218 |
| **1952** | | | | | | | | | | | | | | | | | |
| **Total** | 961,430 | 223,140 | 61,456 | 5,491 | 205,909 | 88,255 | 162,272 | 76,981 | 60,438 | 28,555 | 43,061 | 23,329 | 15,943 | 77,203 | 97,931 | 25,687 | 2,141,038 |
| **1953** | | | | | | | | | | | | | | | | | |
| **Total** | 971,191 | 247,707 | 59,589 | 9,819 | 213,215 | 89,218 | 163,430 | 81,436 | 65,730 | 27,721 | 42,566 | 24,152 | 16,037 | 86,333 | 101,003 | 28,370 | 2,228,017 |
| **1954** | | | | | | | | | | | | | | | | | |
| **Total** | 868,242 | 218,810 | 60,477 | 16,982 | 234,896 | 122,248 | 184,806 | 90,987 | 74,356 | 28,686 | 48,768 | 25,109 | 15,040 | 112,292 | 117,066 | 29,736 | 2,243,501 |
| **1955** | | | | | | | | | | | | | | | | | |
| **May** | 86,177 | 21,600 | 5,271 | 1,870 | 20,280 | 11,219 | 16,985 | 6,870 | 6,639 | 2,609 | 4,460 | 2,337 | 1,369 | 7,639 | 8,508 | 2,688 | 206,521 |
| **June** | 84,458 | 20,565 | 5,173 | 2,124 | 19,837 | 10,715 | 16,476 | 6,480 | 6,480 | 2,628 | 3,854 | 2,227 | 1,285 | 7,141 | 8,837 | 2,604 | 202,444 |
| **July** | 84,400 | 21,769 | 5,297 | 1,725 | 19,561 | 10,463 | 16,918 | 5,902 | 6,802 | 2,737 | 4,238 | 2,251 | 1,338 | 11,223 | 10,413 | 2,660 | 207,697 |
| **Aug.** | 84,877 | 22,029 | 5,168 | 1,880 | 19,190 | 10,185 | 16,566 | 6,751 | 7,088 | 2,529 | 4,422 | 2,197 | 1,175 | 11,012 | 10,089 | 2,576 | 207,781 |
| **Sept.** | 83,448 | 20,898 | 4,967 | 1,754 | 18,863 | 7,603 | 16,496 | 8,609 | 6,323 | 2,621 | 4,451 | 2,121 | 1,198 | 11,227 | 9,817 | 2,464 | 202,860 |
| **Oct.** | 89,449 | 22,206 | 5,212 | 1,545 | 19,345 | 10,262 | 16,735 | 6,940 | 6,906 | 2,735 | 4,704 | 2,243 | 1,176 | 11,644 | 9,972 | 2,604 | 213,678 |
| **Nov.** | 87,616 | 21,398 | 5.066 | 818 | 19,244 | 9,848 | 15,708 | 7,442 | 6,183 | 2,846 | 4,501 | 2,185 | 1,142 | 11,600 | 9,860 | 2,576 | 210,265 |
| **Dec.** | 92,578 | 21,135 | 5,252 | .... | 20,079 | 10,332 | 17,061 | 9,316 | 6,420 | 2,886 | 4,492 | 2,258 | 1,147 | 11,654 | 9,972 | 2,632 | 220,043 |
| **1956** | | | | | | | | | | | | | | | | | |
| **Jan.** | 90,313 | 21,696 | 5,279 | .... | 20,359 | 11,756 | 16,827 | 6,768 | 6,315 | 2,786 | 4,345 | 2,219 | 1,146 | 15,928 | 9,753 | 2,632 | 222,280 |
| **Feb.** | 86,329 | 20,356 | 4,949 | 963 | 20,589 | 9,911 | 15,598 | 7,684 | 5,799 | 2,777 | 3,961 | 2,038 | 1,144 | 10,337 | 8,982 | 2,688 | 208,693 |
| **Mar.** | 91,690 | 22,010 | 5,333 | 1,980 | 20,710 | 9,491 | 16,839 | 9,351 | 6,355 | 2,853 | 4,331 | 2,166 | 1,236 | 11,702 | 9,572 | 2,688 | 224,327 |
| **Apr.** | 88,664 | 21,339 | 5,207 | 1,220 | 20,687 | 10,819 | 16,689 | 7,382 | 6,613 | 2,693 | 4,002 | 2,172 | 1,222 | 13,806 | 9,243 | 2,688 | 218,363 |
| **May** | 81,238 | 21,790 | 5,248 | 1,225 | 21,300 | 11,174 | 17,212 | 6,719 | 7,190 | 2,662 | 4,168 | 2,226 | 1,289 | 13,401 | 10,012 | 2,688 | 214,194 |
| **June** | 78,321 | 20,780 | 5,142 | 1,459 | 21,030 | 11,003 | 16,898 | 8,857 | 6,270 | 2,530 | 4,427 | 2,175 | 1,282 | 12,466 | 8,606 | 2,632 | ..... |
| **July** | 83,080 | 21,691 | 5,198 | 1,285 | ..... | .... | 17,964 | 6,617 | 6,433 | 2,637 | 4,688 | 2,047 | .... | 13,089 | .... | 2,800 | ..... |
| **Aug.** | 89,569 | ..... | 5,154 | 1,427 | ..... | ..... | 6,925 | .... | .... | 2,543 | 4,826 | .... | ..... | ..... | ..... | 2,464 | ..... |

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrothemic. (d) The above totals omits production in Russia, Czechoslovakia, Poland and in Argentina.

## U. K. Virgin Copper Stocks

(In long tons)

British Bureau of Non-Ferrous Metal Statistics

| At start of: | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 55,344 | 61,480 | 76,197 |
| Feb. | 60,402 | 62,771 | 79,377 |
| Mar. | 60,084 | 70,185 | 71,634 |
| Apr. | 47,258 | 67,566 | 73,776 |
| May | 60,118 | 60,767 | 76,481 |
| June | 65,314 | 58,546 | 71,713 |
| July | 68,037 | 64,256 | 76,188 |
| Aug. | 67,307 | 99,628 | 68,197 |
| Sept. | 77,323 | 107,261 | 72,069 |
| Oct. | 72,266 | 93,681 | ..... |
| Nov. | 61,484 | 75,533 | ..... |
| Dec. | 61,673 | 77,749 | ..... |

## U. K. Refined Lead Stocks

British Bureau of Non-Ferrous Metal Statistics

(In long tons)

| At start of: | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 26,887 | 31,173 | 40,987 |
| Feb. | 32,653 | 32,274 | 34,326 |
| Mar. | 30,697 | 39,461 | 29,693 |
| Apr. | 28,312 | 37,587 | 33,974 |
| May | 30,005 | 45,226 | 29,479 |
| June | 29,793 | 38,760 | 30,537 |
| July | 30,437 | 30,816 | 37,088 |
| Aug. | 29,492 | 32,270 | 35,432 |
| Sept. | 26,298 | 48,036 | 35,793 |
| Oct. | 28,958 | 42,912 | ..... |
| Nov. | 22,269 | 42,061 | ..... |
| Dec. | 26,937 | 38,410 | ..... |

## U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

| At start of: | Virgin Zinc | | Zinc. Conc. | |
|---|---|---|---|---|
| | 1955 | 1956 | 1955 | 1956 |
| Jan. | 49,962 | 49,962 | 47,200 | 54,447 |
| Feb. | 48,027 | 45,239 | 43,779 | 49,537 |
| Mar. | 45,679 | 44,288 | 44,176 | 48,667 |
| Apr. | 49,301 | 49,194 | 51,603 | 40,502 |
| May | 53,573 | 49,129 | 47,741 | 36,524 |
| June | 50,447 | 47,226 | 47,791 | 40,136 |
| July | 48,227 | 47,664 | 47,399 | 40,763 |
| Aug. | 54,562 | 49,169 | 50,649 | 47,972 |
| Sept. | 60,935 | 51,946 | 55,350 | 57,125 |
| Oct. | 60,800 | ..... | 55,234 | ..... |
| Nov. | 54,679 | ..... | 60,065 | ..... |
| Dec. | 50,678 | ..... | 58,414 | ..... |

## U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| (Gross Weight) | | | |
| Copper and copper alloys | 264,856 | 33,268 | 33,087 |
| U. of S. Africa | 695 | 51 | 51 |
| N. Rhodesia | 156,776 | 18,972 | 18,232 |
| Canada | 37,206 | 4,584 | 3,933 |
| Belgium | 3,351 | 251 | 355 |
| Germany (W.) | 882 | 327 | 107 |
| Norway | 391 | ... | 1 |
| United States | 4,123 | 642 | 585 |
| Chile | 49,791 | 7,498 | 9,130 |
| Peru | 2,067 | 151 | 150 |
| Belg. Congo | 5,900 | 250 | 525 |
| Other countries | 3,674 | 542 | 18 |
| Of which: | | | |
| Electrolytic | 166,904 | 19,860 | 21,861 |
| Other refined | 24,630 | 4,701 | 2,552 |
| Blister or rough | 71,253 | 8,666 | 8,642 |
| Wrought and alloys | 2,069 | 41 | 32 |
| Total | 264,856 | 33,268 | 33,087 |

## Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

| | Unalloyed | Alloyed* | Total | Virgin | Scrap |
|---|---|---|---|---|---|
| 1953 Total | 243,717 | 192,337 | 447,260 | 322,311 | 124,949 |
| 1954 Total | 328,149 | 251,989 | 580,138 | 448,413 | 131,725 |
| 1955 | | | | | |
| March | 31,901 | 25,894 | 57,795 | 41,083 | 16,712 |
| April | 26,101 | 22,045 | 48,146 | 36,008 | 12,138 |
| May | 31,107 | 23,297 | 54,404 | 39,485 | 14,919 |
| June | 36,163 | 23,904 | 60,067 | 45,367 | 14,700 |
| July | 26,601 | 19,698 | 46,299 | 31,749 | 14,550 |
| August | 24,731 | 18,390 | 43,121 | 33,255 | 9,866 |
| September | 36,286 | 24,007 | 60,293 | 47,180 | 13,113 |
| October | 36,309 | 25,276 | 61,585 | 47,519 | 14,066 |
| November | 35,791 | 25,854 | 61,645 | 48,690 | 12,955 |
| December | 32,953 | 23,108 | 56,061 | 41,130 | 14,931 |
| Total | 377,576 | 281,953 | 659,529 | 496,467 | 163,062 |
| 1956 | | | | | |
| January | 34,567 | 24,461 | 59,028 | 45,676 | 13,352 |
| February | 33,213 | 24,163 | 57,376 | 40,934 | 16,442 |
| March | 32,903 | 24,366 | 57,269 | 43,913 | 13,356 |
| April | 27,489 | 21,029 | 48,518 | 36,418 | 12,100 |
| May | 29,845 | 22,295 | 52,140 | 41,747 | 10,393 |
| June | 33,774 | 21,810 | 55,584 | 43,622 | 11,962 |
| July | 31,752 | 19,316 | 51,086 | 39,149 | 11,919 |
| August | 24,426 | 14,434 | 38,860 | 30,065 | 8,795 |

*Includes copper sulphate effective October, 1954.

## U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| (Gross Weight) | | | |
| Zinc ore and concentrates | 123,563 | 26,502 | 28,558 |
| Zinc conc. | † | 13,904 | † |
| Australia | ... | 6,993 | ... |
| Canada | ... | 5,638 | ... |
| Italy | ... | 706 | ... |
| Other countries | ... | 567 | ... |
| Zinc and zinc alloys | 87,363 | 12,281 | 10,197 |
| N. Rhodesia | 3,571 | 440 | 450 |
| Australia | 4,826 | 500 | ... |
| Canada | 35,781 | 6,356 | 5,292 |
| Belgium | 12,322 | 1,451 | 1,287 |
| Germany (W.) | 2,986 | 4 | 1 |
| Netherlands | 2,162 | 625 | 550 |
| Norway | 550 | 100 | ... |
| United States | 6,520 | 500 | 600 |
| Other countries | 18,645 | 2,305 | 2,017 |
| Of which: | | | |
| Zinc or Spelter, unwrought in ingots, blocks, bars, slab & cakes | 86,863 | 12,151 | 10,185 |
| Other | 500 | 130 | 12 |
| Total | 87,363 | 12,281 | 10,197 |

† Not available.

## Zinc Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

| | 1956 | | |
|---|---|---|---|
| | May | June | July |
| **IMPORTS** | | | |
| U. S. (s.t.) | 14,123 | 10,691 | 12,631 |
| Canada (s.t.) | 4 | ... | ... |
| Denmark | 424 | 332 | 132 |
| France | 1,099 | 1,358 | ... |
| Germany, W.† | 5,812 | 4,068 | ... |
| Italy | 1,128* | 744 | ... |
| Netherlands | 420 | 904 | ... |
| Sweden | 2,717 | 2,320 | 929 |
| Switzerland† | 1,007 | 1,420 | 1,367 |
| U. K. (l.t.) | 11,960 | 10,638 | 12,281 |
| India‡ (l.t.) | 2,929 | 4,054 | ... |
| **EXPORTS** | | | |
| U. S. (s.t.) | 413 | 647 | 629 |
| Canada (s.t.) | 11,357 | 15,296 | 15,499 |
| Denmark | 20 | ... | ... |
| France | 1 | 2 | ... |
| Germany, W.† | 3,199 | 3,411 | ... |
| Italy | 3,950* | 1,560 | ... |
| Netherlands | 1,407 | 548 | ... |
| Norway | 2,423 | 2,261 | ... |
| Switzerland† | 202 | 695 | 444 |
| U. K.** (l.t.) | 337 | 251 | 377 |
| Northern Rhodesia‡ (l.t.) | 1,910 | 2,795 | 1,824 |
| Belg. Congo | 2,980 | ... | ... |

† Includes scrap.
** Includes manufactures.
‡ British Bureau of Non-Ferrous Metal Statistics.
* April-May.

## United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

| | Tin Content of Tin in Ore | | | Tin Metal | | | | |
|---|---|---|---|---|---|---|---|---|
| | Imports | Production* | Stock at end of period* | Imports | Production* | Consumption | Exports & Re-exports | Stock at end of period |
| 1954 Total | 27,494 | 940 | 2,473 | 2,404 | 27,475 | 21,389 | 8,585 | 4,347 |
| 1955 | | | | | | | | |
| July | 4,006 | 95 | 2,700 | 3 | 2,201 | 1,615 | 1,581 | 3,232 |
| August | 2,163 | 78 | 2,300 | 10 | 2,545 | 1,576 | 733 | 3,512 |
| September | 1,738 | 97 | 1,800 | 15 | 2,283 | 1,920 | 981 | 3,053 |
| October | 2,245 | 90 | 2,349 | 35 | 2,197 | 1,866 | 1,097 | 2,363 |
| November | 3,034 | 86 | 2,878 | 436 | 2,421 | 2,081 | 577 | 2,935 |
| December | 1,679 | 71 | 2,181 | 155 | 2,233 | 1,689 | 528 | 2,999 |
| 1955 Total | 27,084 | 1,034 | 2,181 | 1,227 | 27,241 | 22,390 | 8,924 | 2,999 |
| 1956 | | | | | | | | |
| January | 1,548 | 110 | 1,194 | 14 | 2,493 | 1,881 | 704 | 3,236 |
| February | 2,695 | 88 | 2,384 | 129 | 1,769 | 2,082 | 793 | 2,671 |
| March | 2,526 | 94 | 2,705 | 730 | 2,452 | 1,825 | 237 | 3,804 |
| April | 2,045 | 76 | 2,341 | 155 | 1,924 | 1,692 | 475 | 3,638 |
| May | 1,650 | 81 | 1,861 | 39 | 2,455 | 2,301 | 1,013 | 3,438 |
| June | 1,647 | 74 | 1,240 | 69 | 2,060 | 1,797 | 457 | 3,424 |
| July | 3,100 | .. | .... | 173 | 2,082 | 1,854 | 405 | 3,460 |

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

## Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)
(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 21,830 | 15,001 | 22,678 | 26,739 |
| Feb. | 21,075 | 13,954 | 21,533 | 26,321 |
| Mar. | 22,432 | 21,075 | 25,181 | 26,830 |
| Apr. | 21,747 | 20,412 | 24,221 | 26,732 |
| May | 20,179 | 23,012 | 23,921 | 27,743 |
| June | 18,384 | 23,344 | 21,981 | 27,215 |
| July | 19,996 | 21,582 | 21,286 | 27,394 |
| Aug. | 19,886 | 22,000 | 26,424 | ..... |
| Sept. | 16,777 | 22,684 | 24,943 | ..... |
| Oct. | 17,675 | 21,661 | 25,658 | ..... |
| Nov. | 17,101 | 22,981 | 25,340 | ..... |
| Dec. | 18,703 | 24,935 | 27,312 | ..... |
| Year | 235,787 | 252,643 | 290,478. | ..... |

## Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)
(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 11,212 | 6,170 | 5,500 | 4,888 |
| Feb. | 8,710 | 7,560 | 11,882 | 3,856 |
| Mar. | 14,943 | 11,092 | 10,318 | 4,007 |
| Apr. | 14,765 | 9,606 | 11,967 | 7,636 |
| May | 7,039 | 11,483 | 6,416 | 7,214 |
| June | 13,434 | 12,018 | 9,897 | 6,632 |
| July | 1,357 | 13,152 | 8,341 | 9,695 |
| Aug. | 8,869 | 8,646 | 4,884 | .... |
| Sept. | 3,903 | 10,045 | 5,538 | .... |
| Oct. | 7,532 | 8,005 | 8,053 | .... |
| Nov. | 6,581 | 10,817 | 4,622 | .... |
| Dec. | 4,354 | 7,815 | 5,286 | .... |
| Year | 102,879 | 116,409 | 92,704 | ..... |

## Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)
(Fine Ounces)

| | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 547,951 | 429,704 | 435,047 |
| Feb. | 567,225 | 457,261 | 196,803 |
| Mar. | 849,502 | 411,597 | 328,857 |
| Apr. | 572,059 | 493,578 | 348,838 |
| May | 660,724 | 445,054 | 447,710 |
| June | 682,906 | 592,238 | 495,742 |
| July | 1,210,045 | 285,350 | 686,209 |
| Aug. | 953,379 | 644,932 | ..... |
| Sept. | 605,188 | 636,992 | ..... |
| Oct. | 612,874 | 684,301 | ..... |
| Nov. | 606,274 | 387,147 | ..... |
| Dec. | 804,213 | 405,719 | ..... |
| Year | 8,672,340 | 5,873,873 | ..... |

## Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)
(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 7,668 | 9,081 | 11,078 | 15,981 |
| Feb. | 16,411 | 8,385 | 12,897 | 11,041 |
| Mar. | 10,578 | 11,671 | 12,423 | 12,276 |
| Apr. | 11,153 | 11,218 | 10,321 | 14,476 |
| May | 14,726 | 18,407 | 10,911 | 12,851 |
| June | 15,053 | 14,877 | 13,387 | 10,985 |
| July | 13,939 | 15,467 | 12,674 | 13,599 |
| Aug. | 7,272 | 14,158 | 13,219 | ..... |
| Sept. | 8,139 | 14,069 | 13,479 | ..... |
| Oct. | 8,957 | 11,528 | 14,208 | ..... |
| Nov. | 9,062 | 13,372 | 14,545 | ..... |
| Dec. | 9,036 | 13,897 | 14,057 | ..... |
| Year | 131,994 | 156,130 | 153,199 | ..... |

## Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)
(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 18,370 | 17,155 | 22,028 | 21,696 |
| Feb. | 18,677 | 15,199 | 19,865 | 20,356 |
| Mar. | 20,693 | 16,550 | 22,215 | 22,010 |
| Apr. | 20,003 | 16,249 | 21,301 | 21,339 |
| May | 20,090 | 16,530 | 21,599 | 21,790 |
| June | 20,589 | 17,017 | 20,565 | 20,780 |
| July | 21,595 | 17,917 | 21,769 | 21,691 |
| Aug. | 21,703 | 18,755 | 22,029 | ..... |
| Sept. | 21,157 | 18,023 | 20,898 | ..... |
| Oct. | 21,888 | 18,871 | 22,206 | ..... |
| Nov. | 21,051 | 19,662 | 21,398 | ..... |
| Dec. | 21,899 | 21,922 | 21,135 | ..... |
| Year | 247,707 | 213,810 | 257,008 | ..... |

## Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

| | 1954 | 1955 | 1956 |
|---|---|---|---|
| Jan. | 2,603,593 | 2,182,386 | 2,280,575 |
| Feb. | 2,068,740 | 1,960,506 | 2,094,467 |
| Mar. | 2,352,392 | 2,413,591 | 2,296,504 |
| Apr. | 2,745,615 | 2,304,287 | 1,759,396 |
| May | 2,564,919 | 2,235,620 | 2,463,441 |
| June | 2,769 694 | 2,461,675 | 2,493,655 |
| July | 2,717,859 | 2,385,654 | 2,265,536 |
| Aug. | 2,840,385 | 2,480,607 | ..... |
| Sept. | 2,804,384 | 2,386,385 | ..... |
| Oct. | 2,461,823 | 2,371,890 | ..... |
| Nov. | 2,823,719 | 2,088,991 | ..... |
| Dec. | 2,364,826 | 2,388,627 | ..... |
| Year | 31,117,949 | 27,696,319 | ..... |

## Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*
(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 19,502 | 17,716 | 18,959 | 16,002 |
| Feb. | 16,888 | 16,863 | 15,018 | 14,344 |
| Mar. | 14,183 | 17,104 | 19,113 | 16,857 |
| Apr. | 18,640 | 19,452 | 17,889 | 11,573 |
| May | 16,120 | 19,953 | 16,808 | 15,446 |
| June | 15,302 | 18,988 | 17,800 | 18,145 |
| July | 11,969 | 19,164 | 16,650 | 15,841 |
| Aug. | 13,864 | 18,237 | 16,676 | ..... |
| Sept. | 14,335 | 17,066 | 15,972 | ..... |
| Oct. | 16,327 | 16,569 | 13,658 | ..... |
| Nov. | 19,433 | 18,365 | 15,182 | ..... |
| Dec. | 19,273 | 19,093 | 17,857 | ..... |
| Year | 195,836 | 219,280 | 201,583 | ..... |

*New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

## Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 17,478 | 16,625 | 22,181 | 15,550 |
| Feb. | 13,580 | 11,328 | 25,556 | 11,757 |
| Mar. | 18,307 | 18,199 | 20,178 | 8,822 |
| Apr. | 17,068 | 17,926 | 21,018 | 14,317 |
| May | 15,595 | 13,926 | 14,820 | 11,357 |
| June | 14,919 | 15,654 | 19,581 | 15,296 |
| July | 10,068 | 27,582 | 13,522 | 15,499 |
| Aug. | 8,594 | 14,934 | 16,581 | ..... |
| Sept. | 9,423 | 17,298 | 11,793 | ..... |
| Oct. | 11,862 | 13,064 | 19,836 | ..... |
| Nov. | 10,685 | 16,224 | 14,164 | ..... |
| Dec. | 10,809 | 23,277 | 14,607 | ..... |
| Year | 158,388 | 206,037 | 213,837 | ..... |

## Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 12,517 | 12,765 | 14,387 | 14,985 |
| Feb. | 10,662 | 11,874 | 13,375 | 14,997 |
| Mar. | 12,268 | 13,619 | 15,544 | 15,504 |
| Apr. | 11,841 | 13,015 | 15,011 | 14,431 |
| May | 11,610 | 13,458 | 15,352 | 15,203 |
| June | 11,687 | 13,269 | 14,835 | 14,492 |
| July | 11,801 | 12,901 | 14,530 | 15,125 |
| Aug. | 11,911 | 13,428 | 14,825 | ..... |
| Sept. | 12,031 | 13,521 | 13,734 | ..... |
| Oct. | 12,469 | 14,323 | 14,411 | ..... |
| Nov. | 12,764 | 14,159 | 14,290 | ..... |
| Dec. | 12,122 | 14,947 | 14,881 | ..... |
| Year | 143,693 | 161,79 | 175,173 | ..... |

## Canadian Copper Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| Ore, matte, regulus, etc. (content) | 24,114 | 3,528 | 6,562 |
| United States | 14,949 | 2,138 | 4,493 |
| Belgium | 100 | ... | 100 |
| Germany (W.) | 557 | ... | 557 |
| Norway | 7,865 | 1,283 | 1,334 |
| U. Kingdom | 643 | 107 | 78 |
| Ingots, bars, billets, anodes | 91,203 | 10,985 | 13,599 |
| United States | 51,738 | 6,826 | 8,477 |
| France | 5,839 | 707 | 784 |
| U. Kingdom | 32,503 | 3,227 | 4,113 |
| India | 1,120 | 224 | 224 |
| Other countries | 8 | 1 | 1 |
| **Total Exports:** | | | |
| Crude and refined | 115,322 | 14,513 | 20,161 |
| Old and scrap | 8,193 | 703 | 772 |
| Rods, strips, sheet and tubing | 7,683 | 836 | 627 |

## Canadian Zinc Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| Ore (zinc cont.) | 117,538 | 13,405 | 31,931 |
| United States | 104,626 | 12,626 | 19,798 |
| Belgium | 1,530 | 779 | 751 |
| Norway | 5,071 | ... | 5,071 |
| U. Kingdom | 6,311 | ... | 6,311 |
| Slab zinc | 92,598 | 15,296 | 15,499 |
| United States | 52,764 | 5,618 | 5,557 |
| Argentina | 498 | 384 | 114 |
| Brazil | 13 | 13 | ... |
| U. Kingdom | 38,029 | 8,721 | 9,828 |
| Korea | 63 | ... | ... |
| Hong Kong | 56 | ... | ... |
| Taiwan | 53 | ... | ... |
| India | 1,120 | 560 | ... |
| Other countries | 2 | ... | ... |
| **Total Exports:** | | | |
| Ore and slabs | 210,136 | 28,701 | 47,430 |
| Zinc scrap, dross, ashes | 3,175 | 393 | 1,141 |
| United States | 365 | 28 | 25 |
| Belgium | 1,915 | 177 | 1,116 |
| Germany (W.) | 97 | ... | ... |
| Netherlands | 630 | 85 | ... |
| Italy | 53 | 53 | ... |
| India | 115 | 50 | ... |

## Canada's Nickel Exports

(Dominion Bureau of Statistics)

(Refined, in oxides, matte, etc.)
(In Tons)

| | 1955 | 1956 |
|---|---|---|
| January | 14,421 | 15,121 |
| February | 13,915 | 13,940 |
| March | 13,564 | 16,219 |
| April | 16,083 | 14,448 |
| May | 14,761 | 14,729 |
| June | 16,296 | 16,403 |
| July | 13,929 | 11,079 |
| August | 14,861 | ..... |
| September | 14,638 | ..... |
| October | 13,589 | ..... |
| November | 13,073 | ..... |
| December | 14,749 | ..... |
| Year | 173,879 | ..... |

## Copper Imports and Exports by Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

| | 1956 | | |
|---|---|---|---|
| | May | June | July |
| **IMPORTS** | | | |
| U. S. (blist., s.t.) | 23,191 | 29,106 | 21,003 |
| (ore, etc., s.t.) | 12,011 | 8,515 | 10,982 |
| (ref., s.t.) | 15,994 | 14,683 | 16,782 |
| Denmark | 163 | 53 | 100 |
| France (crude) | 813 | ... | ... |
| (refined) | 16,151 | 14,101 | ... |
| Italy | 17,307* | 7,670 | ... |
| Germany, W. | 17,508 | 22,706 | ... |
| Netherlands | 2,367 | 814 | ... |
| Norway | 290 | 325 | ... |
| Sweden | 4,195 | 5,112 | 3,156 |
| Switzerland | 4,330 | 2,326 | 3,557 |
| U. K. (l.t.) | 30,518 | 39,957 | 33,268 |
| India‡ (ref., l.t.) | 2,032 | 2,023 | ... |
| **EXPORTS** | | | |
| U. S. (ore and unref., s.t.) | 196 | 627 | 664 |
| (ref., s.t.) | 23,922 | 15,147 | 9,251 |
| Canada (ref., s.t.) | 12,851 | 10,985 | 13,599 |
| Finland** | 55 | 221 | 5 |
| Germany, W. | 3,301 | 5,259 | ... |
| Norway | 988 | 1,274 | ... |
| Sweden | 742 | 1,602 | 1,106 |
| U. K. (l.t.) | 3,222 | 2,549 | 3,978 |
| Turkey† | 2,000 | ... | ... |
| N. Rhodesia (ref. & blist., l.t.)‡ | 34,199 | 29,758 | 29,401 |

† Includes copper alloys.
** Includes old.
‡ British Bureau of Non-Ferrous Metal Statistics.
* April-May.

## U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-Aug. | July | Aug. |
| (Gross Weight) | | | |
| Copper unwrought, ingots, blocks, slabs, bars, etc. | 19,090 | 3,978 | 2,605 |
| Plates, sheets, rods, etc. | 12,321 | 2,248 | 1,778 |
| Wire (including uninsulated electric wire) | 30,832 | 6,740 | 3,426 |
| Tubes | 6,701 | 748 | 824 |
| Other copper worked (incl. pipe fittings) | 923 | 79 | 221 |
| Total | 69,867 | 13,793 | 8,854 |

## Canadian Lead Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| Ore (lead content) | 25,527 | 2,823 | 10,581 |
| United States | 17,613 | 2,258 | 3,232 |
| Belgium | 3,845 | 565 | 3,280 |
| Germany (W.) | 4,069 | ... | 4,069 |
| Refined lead | 43,929 | 6,632 | 9,695 |
| United States | 8,883 | 764 | 741 |
| Cuba | 1 | ... | ... |
| Venezuela | 44 | ... | ... |
| U. Kingdom | 31,058 | 5,124 | 8,148 |
| Japan | 3,806 | 743 | 728 |
| Other countries | †137 | 1 | †78 |
| **Total Exports:** | | | |
| Ore and refined | 69,456 | 9,455 | 20,276 |
| Pipe and tubing | 11 | ... | 5 |
| Lead scrap | 155 | 9 | 100 |

† Includes 75 tons to Taiwan.

## French Copper Imports

(American Bureau of Metal Statistics)

(In Metric Tons)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| Ore (gross weight) | 2,656 | 1,399 | ... |
| Fr. Morocco | 2,656 | 1,399 | ... |
| Crude copper for refining (blister, black and cement) | 3,354 | ... | 814 |
| Belgium | 102 | ... | ... |
| Belg. Congo | 3,251 | ... | 813 |
| Germany | 1 | ... | 1 |
| Refined | 98,073 | 14,101 | 14,513 |
| United States | 35,292 | 5,563 | 3,078 |
| Canada | 5,103 | 776 | 462 |
| Chile | 1,340 | 230 | 700 |
| Peru | 3 | ... | ... |
| Belgium | 24,638 | 3,029 | 4,891 |
| Germany (W.) | 3,117 | 1,085 | 492 |
| Norway | 817 | ... | ... |
| Sweden | 254 | ... | 102 |
| U. Kingdom | 1,390 | 253 | 330 |
| Belg. Congo | 17,642 | 2,198 | 3,386 |
| U. of S. Africa | 521 | ... | ... |
| Rhodesia-Nyassaland | 7,911 | 966 | 1,072 |
| Other countries | 45 | 1 | ... |
| **Total Imports:** | | | |
| Crude & refined | 104,083 | 15,500 | 15,327 |

## French Zinc Imports

(American Bureau of Metal Statistics)

(In Metric Tons)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| Ore (gross weight) | 171,999 | 27,488 | 20,315 |
| Canada | 5,083 | ... | ... |
| Peru | 8,227 | ... | 1,224 |
| Belgium | 818 | ... | ... |
| Germany (W.) | 2,530 | 500 | 500 |
| Greece | 2,270 | ... | ... |
| Italy | 9,819 | 457 | 2,189 |
| Netherlands | 304 | ... | ... |
| Norway | 669 | 440 | ... |
| Spain | 27,565 | 5,486 | 2,084 |
| Yugoslavia | 8,515 | 1,115 | ... |
| Algeria | 34,335 | 8,625 | 5,600 |
| Fr. Morocco | 50,806 | 8,157 | 8,698 |
| Tunisia | 7,301 | 1,185 | ... |
| Belg. Congo | 5,373 | ... | ... |
| Australia | 7,581 | 1,523 | ... |
| Burma | 500 | ... | ... |
| Other countries | 303 | ... | 20 |
| Slabs, bars, blocks, etc. | 7,158 | 1,358 | 407 |
| Mexico | 130 | 30 | ... |
| Belgium | 6,393 | 1,264 | 255 |
| Germany (W.) | 400 | ... | 152 |
| Italy | 180 | 50 | ... |
| U. Kingdom | 2 | ... | ... |
| Algeria | 53 | 14 | ... |

## French Metal Exports

(American Bureau of Metal Statistics)

(In Metric Tons)

| | 1956 | | |
|---|---|---|---|
| | Jan.-July | June | July |
| **Lead** | | | |
| Ore (gross weight) | 191 | 30 | 66 |
| Pig lead: | | | |
| Non-argentiferous | 6,271 | 351 | 38 |
| Antimonial lead | 333 | 25 | 34 |
| **Zinc:** | | | |
| Slabs, bars, blocks, etc. | 24 | 2 | ... |
| **Copper:** | | | |
| Crude copper for refining (blister, black & cement) | 366 | 156 | 59 |

## Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL
(Bureau of Census — Thousands of Pounds)

| | Aluminum | Copper | Magnesium | Zinc | Lead Die |
|---|---|---|---|---|---|
| 1951 Total | 515,131 | 1,197,443 | 30,825 | 487,996 | 25,936 |
| 1952 Total | 518,979 | 1,009,910 | 34,857 | 408,353 | 20,941 |
| 1953 Total | 658,022 | 990,496 | 34,517 | 521,253 | 20,444 |
| 1954 Total | 607,764 | 834,557 | 25,572 | 474,741 | 18,396 |
| 1955 | | | | | |
| February | 66,869 | 75,253 | 2,160 | 58,585 | 1,571 |
| March | 78,958 | 92,149 | 2,572 | 71,811 | 1,537 |
| April | 73,049 | 84,183 | 2,633 | 71,595 | 1,614 |
| May | 71,691 | 85,008 | 2,399 | 63,735 | 1,530 |
| June | 68,473 | 90,476 | 2,367 | 66,569 | 2,045 |
| July | 55,033 | 65,816 | 1,920 | 47,928 | 1,684 |
| August | 64,864 | 87,206 | 2,176 | 62,677 | 1,904 |
| September | 67,170 | 89,600 | 2,478 | 62,030 | 1,924 |
| October | 72,197 | 91,192 | 2,302 | 71,689 | 1,789 |
| November | 75,065 | 90,345 | 2,325 | 75,099 | 1,896 |
| December | 75,275 | 88,287 | 2,255 | 70,950 | 1,817 |
| Total | 833,058 | 1,011,748 | 27,892 | 781,254 | 21,045 |
| 1956 | | | | | |
| January | 74,152 | 89,767 | 2,959 | 68,050 | 1,598 |
| February | 73,096 | 91,706 | 2,977 | 66,584 | 1,636 |
| March | 73,785 | 96,085 | 3,046 | 65,760 | 1,644 |
| April | 67,880 | 90,679 | 3,140 | 58,274 | 1,910 |
| May | 65,786 | 89,188 | 3,021 | 52,205 | 1,919 |
| June | 58,189 | 78,921 | 2,949 | 47,775 | 1,883 |
| July | 52,955 | 60,926 | 2,810 | 42,227 | 1,551 |

## Copper Castings Shipments

BY TYPE OF CASTING
(Bureau of Census) (Thousands of Pounds)

| | Total | Sand | Permanent Mold | Die | All Other |
|---|---|---|---|---|---|
| 1951 Total | 1,197,443 | 1,075,437 | 69,883 | 12,516 | 39,607 |
| 1952 Total | 1,009,910 | 910,862 | 63,865 | 8,259 | 26,924 |
| 1953 Total | 990,496 | 888,369 | 61,316 | 10,077 | 30,734 |
| Total | 834,557 | 751,804 | 48,849 | 6,480 | 27,394 |
| 1954 | | | | | |
| 1955 | | | | | |
| January | 72,233 | 64,540 | 4,678 | 591 | 2,424 |
| February | 75,253 | 67,768 | 4,598 | 641 | 2,246 |
| March | 92,149 | 83,149 | 5,649 | 742 | 2,609 |
| April | 84,183 | 75,903 | 5,152 | 654 | 2,474 |
| May | 85,008 | 76,064 | 5,513 | 764 | 2,667 |
| June | 90,476 | 80,869 | 5,840 | 739 | 3,028 |
| July | 65,816 | 59,138 | 3,998 | 691 | 1,989 |
| August | 87,206 | 77,721 | 5,322 | 844 | 2,413 |
| September | 89,600 | 80,481 | 5,663 | 692 | 2,824 |
| October | 91,192 | 82,958 | 4,513 | 727 | 2,994 |
| November | 90,345 | 80,934 | 5,807 | 743 | 2,861 |
| December | 88,287 | 78,327 | 6,368 | 713 | 2,879 |
| Total | 1,011,748 | 907,852 | 63,041 | 8,541 | 31,408 |
| 1956 | | | | | |
| January | 89,767 | 80,116 | 6,135 | 799 | 2,717 |
| February | 91,706 | 82,244 | 5,888 | 727 | 2,847 |
| March | 96,085 | 85,894 | 6,299 | 782 | 3,110 |
| April | 90,679 | 81,333 | 5,835 | 722 | 2,789 |
| May | 89,188 | 80,155 | 5,398 | 751 | 2,854 |
| June | 78,921 | 70,260 | 5,052 | 755 | 2,854 |
| July | 60,926 | 55,027 | 3,193 | 506 | 2,200 |

## Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included
(Cents per pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 58.62 | 60.00 | 64.50 | 64.50 |
| Feb. | 60.00 | 60.00 | 64.50 | 64.50 |
| Mar. | 60.00 | 60.00 | 64.50 | 64.50 |
| Apr. | 60.00 | 60.00 | 64.50 | 64.50 |
| May | 60.00 | 60.00 | 64.50 | 64.50 |
| June | 60.00 | 60.00 | 64.50 | 64.50 |
| July | 60.00 | 60.00 | 64.50 | 64.50 |
| Aug. | 60.00 | 60.00 | 64.50 | 64.50 |
| Sept. | 60.00 | 60.00 | 64.50 | 64.50 |
| Oct. | 60.00 | 60.00 | 64.50 | .... |
| Nov. | 60.00 | 60.98 | 64.50 | .... |
| Dec. | 60.00 | 64.50 | 64.50 | .... |
| Av. | 59.885 | 60.46 | 64.50 | .... |

## Platinum Averages

N. Y. MONTHLY QUOTATIONS
(Dollars per Troy Ounce)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 91.50 | 91.40 | 81.00 | 106.30 |
| Feb. | 91.50 | 91.00 | 78.16 | 104.34 |
| Mar. | 91.50 | 87.88 | 78.00 | 104.23 |
| Apr. | 91.50 | 85.50 | 77.94 | 103.92 |
| May | 91.50 | 85.50 | 77.50 | 105.23 |
| June | 92.81 | 85.50 | 78.33 | 106.50 |
| July | 94.00 | 85.50 | 81.78 | 106.50 |
| Aug. | 94.00 | 85.00 | 84.59 | 105.76 |
| Sept. | 92.50 | 85.50 | 91.96 | 105.50 |
| Oct. | 92.50 | 83.62 | 94.60 | .... |
| Nov. | 92.50 | 81.07 | 103.11 | .... |
| Dec. | 92.15 | 80.64 | 106.58 | .... |
| Av. | 92.496 | 85.72 | 86.12 | .... |

## Prompt Tin Prices

(Straits, Open Market, N. Y.)
Monthly Average Prices
(Cents per pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 121.50 | 84.84 | 87.628 | 104.768 |
| Feb. | 121.50 | 85.04 | 90.75 | 100.586 |
| Mar. | 121.415 | 91.24 | 91.065 | 100.524 |
| Apr. | 101.07 | 96.238 | 91.41 | 99.145 |
| May | 97.387 | 93.51 | 91.38 | 96.853 |
| June | 92.933 | 94.24 | 93.64 | 94.488 |
| July | 81.826 | 96.55 | 96.825 | 96.131 |
| Aug. | 80.69 | 93.381 | 96.456 | 98.924 |
| Sept. | 82.275 | 93.536 | 96.256 | 103.559 |
| Oct. | 80.897 | 93.00 | 96.075 | .... |
| Nov. | 83.26 | 91.099 | 97.882 | .... |
| Dec. | 84.693 | 88.571 | 107.75 | .... |
| Av. | 95.787 | 91.77 | 94.73 | .... |

## Monthly Tin Production at Longhorn Smelter

(From Concentrates)
(In tons of 2,240 pounds)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 4,000 | 2,700 | 2,402 | 1,754 |
| Feb. | 3,400 | 3,008 | 2,505 | 1,704 |
| Mar. | 3,850 | 3,559 | 2,353 | 1,802 |
| Apr. | 3,750 | 3,006 | 2,103 | 1,803 |
| May | 3,100 | 2,054 | 1,604 | 2,001 |
| June | 3,000 | 1,205 | 851 | 953½ |
| July | 3,000 | NIL | 950 | NIL |
| Aug. | 2,600 | 2,002 | 1,749 | 1,453 |
| Sept. | 2,700 | 2,404 | 1,751 | 1,349 |
| Oct. | 2,751 | 2,404 | 1,803 | .... |
| Nov. | 2,750 | 2,404 | 1,803 | .... |
| Dec. | 2,750 | 2,404 | 2,453 | .... |
| Total | 37,651 | 27,150 | 22,327 | .... |

## Quicksilver Averages

N. Y. Monthly Averages
Virgin, Dollars per 76-lb. Flask

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 214.88 | 189.60 | 324.68 | 277.88 |
| Feb. | 207.37 | 190.00 | 324.68 | 270.29 |
| Mar. | 199.92 | 201.63 | 322.61 | 261.40 |
| Apr. | 197.90 | 221.36 | 318.14 | 267.22 |
| May | 196.50 | 251.20 | 306.62 | 267.675 |
| June | 193.42 | 273.46 | 286.98 | 260.69 |
| July | 192.21 | 287.40 | 268.22 | 256.06 |
| Aug. | 190.42 | 290.71 | 255.18 | 256.00 |
| Sept. | 187.04 | 314.08 | 263.70 | 256.00 |
| Oct. | 184.62 | 329.50 | 279.02 | ..... |
| Nov. | 186.00 | 321.17 | 282.50 | ..... |
| Dec. | 188.38 | 319.96 | 282.27 | ..... |
| Av. | 194.89 | 265.84 | 292.90 | ..... |

# Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

| | Stocks beginning of month short tons | Production short tons | Sold or Used Short tons | Sold or Used Value f. o. b. plant | Stocks end of month short tons |
|---|---|---|---|---|---|
| 1955 | | | | | |
| June | 12,052 | 127,634 | 127,056 | 55,009,348 | 12,630 |
| July | 12,630 | 132,669 | 128,961 | 55,822,814 | 16,338 |
| August | 16,338 | 133,551 | 136,472 | 59,965,645 | 13,417 |
| September | 13,417 | 130,606 | 134,125 | 60,205,054 | 9,898 |
| October | 9,898 | 134,655 | 128,116 | 57,924,207 | 16,437 |
| November | 16,437 | 133,689 | 135,953 | 61,464,364 | 14,173 |
| December | 14,173 | 140,748 | 139,901 | 63,319,738 | 15,020 |
| 1956 | | | | | |
| January | 15,020 | 140,394 | 135,598 | $61,362,549 | 19,816 |
| February | 19,816 | 132,763 | 135,505 | 61,284,856 | 17,074 |
| March | 17,074 | 145,895 | 143,729 | 65,043,396 | 19,240 |
| April | 19,240 | 144,726 | 149,854 | 70,479,739 | 14,112 |
| May | 14,112 | 150,800 | 153,014 | 73,940,389 | 11,898 |
| June | 11,898 | 145,726 | 140,225 | 67,775,239 | 17,399 |
| July | 17,399 | 151,624 | 134,098 | 64,858,158 | 34,925 |
| August | 34,925 | 92,406 | 90,614 | 44,519,556 | 36,717 |

# Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS

(Bureau of Census — Thousands of Pounds)

| | Total | Plate, Sheet, & Strip | Rolled Structural Shapes, Rod, Bar & Wire | Extruded Shapes Tube Blooms & Tubing | Powder, Flake, & Paste |
|---|---|---|---|---|---|
| 1952 Total | 1,924,750 | 1,085,699 | 443,546 | 347,542 | 47,963 |
| 1953 Total | 2,286,865 | 1,368,165 | 422,946 | 451,922 | 44,732 |
| 1954 Total | 2,088,439 | 1,165,090 | 357,229 | 518,070 | 46,255 |
| 1955 | | | | | |
| March | 234,730 | 128,432 | 31,051 | 71,981 | 3,266 |
| April | 227,939 | 123,293 | 29,835 | 72,017 | 2,794 |
| May | 234,309 | 125,176 | 30,979 | 75,371 | 2,813 |
| June | 255,701 | 136,420 | 35,306 | 74,792 | 3,035 |
| July | 210,222 | 113,305 | 27,070 | 62,918 | 2,379 |
| August | 250,036 | 141,400 | 29,413 | 67,904 | 3,039 |
| September | 244,135 | 134,240 | 32,973 | 67,407 | 2,926 |
| October | 248,806 | 138,328 | 30,554 | 71,456 | 2,926 |
| November | 245,256 | 137,109 | 31,656 | 67,798 | 2,658 |
| December | 242,993 | 138,592 | 31,802 | 64,159 | 1,837 |
| Total | 2,805,500 | 1,542,368 | 365,391 | 812,311 | 35,854 |
| 1956 | | | | | |
| January | 251,772 | 142,049 | 34,008 | 67,499 | 2,118 |
| February | 240,999 | 134,077 | 33,727 | 65,261 | 1,901 |
| March | 232,767 | 128,432 | 30,972 | 63,482 | 1,947 |
| April | 260,610 | 143,859 | 37,971 | 69,639 | 3,316 |
| May | 264,378 | 147,613 | 39,900 | 68,106 | 2,215 |
| June | 240,415 | 132,510 | 33,438 | 65,600 | 2,119 |
| July | 247,895 | 139,571 | 35,346 | 64,249 | 2,736 |
| August | 248,457 | 141,400 | 32,413 | 66,315 | 3,039 |

# Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

(Thousands of Pounds)

| | Total | Sand | Permanent Mold | Die | All Other |
|---|---|---|---|---|---|
| 1951 Total | 515,131 | 193,378 | 160,011 | 151,465 | 10,277 |
| 1952 Total | 518,979 | 194,616 | 146,883 | 169,732 | 7,748 |
| 1953 Total | 658,022 | 214,553 | 200,025 | 239,330 | 4,114 |
| 1955 | | | | | |
| January | 64,414 | 13,358 | 23,679 | 26,819 | 558 |
| February | 66,869 | 13,579 | 24,319 | 28,234 | 737 |
| March | 78,958 | 16,019 | 29,029 | 33,229 | 682 |
| April | 73,049 | 14,041 | 28,028 | 30,208 | 772 |
| May | 71,691 | 14,235 | 25,597 | 31,243 | 616 |
| June | 68,473 | 14,920 | 24,682 | 27,939 | 932 |
| July | 55,033 | 11,716 | 21,006 | 21,656 | 655 |
| August | 64,864 | 14,916 | 22,267 | 27,004 | 576 |
| September | 67,170 | 14,870 | 23,075 | 28,532 | 693 |
| October | 72,197 | 14,485 | 25,135 | 31,741 | 836 |
| November | 75,065 | 14,327 | 26,267 | 33,852 | 619 |
| December | 75,275 | 15,291 | 25,031 | 34,347 | 606 |
| 1955 Total | 833,058 | 171,757 | 298,115 | 354,804 | 8,282 |
| 1956 | | | | | |
| January | 74,152 | 15,861 | 24,528 | 33,253 | 510 |
| February | 73,096 | 15,560 | 23,963 | 32,949 | 624 |
| March | 73,785 | 16,597 | 22,816 | 33,965 | 407 |
| April | 67,880 | 14,732 | 20,718 | 31,782 | 648 |
| May | 65,786 | 15,600 | 19,669 | 29,814 | 703 |
| June | 58,189 | 13,448 | 19,067 | 25,027 | 647 |
| July | 52,955 | 12,398 | 16,388 | 23,491 | 678 |

# Virgin Aluminum

Virgin 99% Delivered

Monthly Average Prices

(Cents per pound)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 20.173 | 21.50 | 22.90 | 24.40 |
| Feb. | 20.50 | 21.50 | 23.20 | 24.40 |
| Mar. | 20.50 | 21.50 | 23.20 | 24.60 |
| Apr. | 20.50 | 21.50 | 23.20 | 25.90 |
| May | 20.50 | 21.50 | 23.20 | 25.90 |
| June | 20.50 | 21.50 | 23.20 | 25.90 |
| July | 20.962 | 21.50 | 23.20 | 25.90 |
| Aug | 21.50 | 22.12 | 24.26 | 26.70 |
| Sept. | 21.50 | 22.20 | 24.40 | 27.10 |
| Oct. | 21.50 | 22.20 | 24.40 | .... |
| Nov. | 21.50 | 22.20 | 24.40 | .... |
| Dec. | 21.50 | 22.20 | 24.40 | .... |
| Av. | 20.928 | 21.785 | 23.655 | .... |

# Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 1,313 | 972 | 1,776 | 2,118 |
| Feb. | 1,601 | 1,136 | 1,648 | 1,901 |
| Mar. | 1,601 | 1,136 | 1,947 | 1,946 |
| Apr. | 1,708 | 892 | 1,756 | 2,279 |
| May | 1,699 | 1,129 | 1,836 | 2,462 |
| June | 1,192 | 1,312 | 1,686 | 2,302 |
| July | 1,589 | 1,032 | 1,437 | 2,002 |
| Aug. | 1,433 | 1,111 | 1,742 | 2,949 |
| Sept. | 1,254 | 1,183 | 2,159 | 2,810 |
| Oct. | 1,409 | 1,002 | 1,667 | .... |
| Nov. | 1,314 | 1,243 | 1,955 | .... |
| Dec. | 919 | 1,673 | 1,577 | .... |
| Total | 16,885 | 13,743 | 21,186 | ..... |

# Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 193.00 | 200.00 | 170.00 | 170.00 |
| Feb. | 200.00 | 170.00 | 170.00 | 170.00 |
| Mar. | 200.00 | 170.00 | 170.00 | 170.00 |
| Apr. | 200.00 | 170.00 | 170.00 | 170.00 |
| May | 200.00 | 170.00 | 170.00 | 170.00 |
| June | 200.00 | 170.00 | 170.00 | 170.00 |
| July | 200.00 | 170.00 | 170.00 | 170.00 |
| Aug. | 200.00 | 170.00 | 170.00 | 170.00 |
| Sept. | 200.00 | 170.00 | 170.00 | 170.00 |
| Oct. | 200.00 | 170.00 | 170.00 | ..... |
| Nov. | 200.00 | 170.00 | 170.00 | ..... |
| Dec. | 200.00 | 170.00 | 170.00 | ..... |
| Av. | 199.44 | 172.50 | 170.00 | ..... |

# Steel Ingot Production

(American Iron and Steel Institute)

| Period | Estimated Production — All Companies OPEN HEARTH Net tons | OPEN HEARTH Per cent of capacity | BESSEMER Net tons | BESSEMER Per cent of capacity | ELECTRIC Net tons | ELECTRIC Per cent of capacity | TOTAL Net tons | TOTAL Per cent of capacity | Calculated weekly production, all companies (net tons) |
|---|---|---|---|---|---|---|---|---|---|
| 1952 Total | 82,846,439 | 87.2 | 3,523,677 | 65.5 | 6,797,923 | 82.6 | 93,168,039 | 85.8 | 1,782,097 |
| 1953 Total | 100,473,823 | 97.9 | 3,855,705 | 83.2 | 7,280,191 | 71.1 | 111,609,719 | 94.9 | 2,140,578 |
| 1954 Total | 80,327,494 | 73.6 | 2,543,104 | 53.2 | 5,436,054 | 52.0 | 88,311,652 | 71.0 | 1,693,741 |
| 1955 | | | | | | | | | |
| May | 9,307,291 | 99.4 | 305,347 | 75.1 | 715,678 | 77.9 | 10,328,316 | 96.6 | 2,331,448 |
| June | 8,764,430 | 96.6 | 283,544 | 72.0 | 698,493 | 78.6 | 9,746,467 | 94.1 | 2,271,904 |
| July | 8,232,535 | 88.1 | 268,348 | 66.1 | 600,063 | 65.5 | 9,100,946 | 85.8 | 2,059,038 |
| August | 8,600,612 | 91.8 | 298,372 | 73.5 | 694,961 | 75.7 | 9,594,545 | 89.7 | 2,165,812 |
| September | 8,829,266 | 97.6 | 307,171 | 78.2 | 745,888 | 84.1 | 9,882,325 | 95.7 | 2,308,954 |
| October | 9,369,704 | 100.0 | 330,150 | 81.2 | 801,196 | 87.3 | 10,501,050 | 98.2 | 2,370,440 |
| November | 9,141,244 | 100.8 | 306,674 | 77.9 | 799,480 | 89.9 | 10,247,398 | 99.0 | 2,388,671 |
| December | 9,390,000 | 100.5 | 292,000 | 72.0 | 786,000 | 85.8 | 10,468,000 | 98.1 | 2,368,000 |
| Total | 105,342,886 | 95.6 | 3,319,088 | 69.3 | 8,338,592 | 77.2 | 117,000,566 | 92.0 | 2,243,969 |
| 1956 | | | | | | | | | |
| January | 9,676,151 | 101.4 | 323,235 | 79.5 | 828,845 | 86.6 | 10,828,231 | 99.3 | 2,444,296 |
| February | 9,043,064 | 101.3 | 296,543 | 78.0 | 779,388 | 87.1 | 10,118,995 | 99.2 | 2,444,202 |
| March | 9,795,263 | 102.7 | 310,060 | 76.3 | 819,465 | 85.7 | 10,924,788 | 100.2 | 2,466,092 |
| April | 9,437,945 | 102.2 | 306,388 | 77.9 | 779,452 | 84.2 | 10,523,785 | 99.7 | 2,458,097 |
| May | 9,370,167 | 98.2 | 297,990 | 73.3 | 822,219 | 86.0 | 10,490,376 | 96.2 | 2,368,031 |
| June | 8,665,044 | 93.9 | 282,846 | 71.9 | 773,546 | 83.6 | 9,721,436 | 92.1 | 2,266,069 |
| July | 1,330,151 | 13.9 | ..... | ... | 292,012 | 30.5 | 1,622,163 | 14.9 | 367,005 |
| August | 7,213,274 | 75.6 | 189,564 | 46.6 | 719,759 | 75.3 | 8,122,597 | 74.5 | 1,833,543 |
| September | 9,369,000 | 101.5 | 287,000 | 72.9 | 789,000 | 85.3 | 10,445,000 | 99.0 | 2,440,000 |

# Blast Furnace Output

(American Iron and Steel Institute)

| | net tons Pig Iron | Ferro-manganese & Spiegel | Total | % Capacity |
|---|---|---|---|---|
| 1947 | | | | |
| Ttl. Yr. | 58,507,169 | 702,561 | 59,209,730 | 90.1 |
| 1948 | | | | |
| Ttl. Yr. | 60,135,941 | 712,899 | 60,848,840 | 90.2 |
| 1949 | | | | |
| Ttl. Yr. | 53,613,779 | 592,564 | 54,206,343 | 76.8 |
| 1950 | | | | |
| Ttl. Yr. | 64,810,272 | 673,896 | 65,484,168 | 91.5 |
| 1951 | | | | |
| Ttl. Yr. | 70,487,380 | 745,881 | 71,232,761 | 93.8 |
| 1952 | | | | |
| Ttl. Yr. | 61,528,665 | 629,926 | 62,158,591 | 84.2 |
| 1953 | | | | |
| Total | 74,987,721 | 856,038 | 75,842,759 | 96.5 |
| 1954 | | | | |
| June | 4,683,629 | 40,521 | 4,724,150 | 70.0 |
| July | 4,590,076 | 36,108 | 4,626,184 | 66.8 |
| Aug. | 4,629,291 | 37,744 | 4,567,035 | 71.0 |
| Sept. | 4,417,888 | 43,934 | 4,461,822 | 66.8 |
| Oct. | 4,937,436 | 46,244 | 4,983,680 | 71.5 |
| Nov. | 5,204,446 | 52,454 | 5,256,900 | 77.0 |
| Dec. | 5,526,720 | 59,793 | 5,586,518 | 80.4 |
| Total | 58,119,882 | 568,735 | 58,688,117 | 71.6 |
| 1955 | | | | |
| Jan. | 5,729,404 | 55,249 | 5,784,653 | 81.1 |
| Feb. | 5,894,685 | 48,182 | 5,442,767 | 84.5 |
| Mar. | 6,406,902 | 57,049 | 6,463,951 | 90.6 |
| Apr. | 6,329,927 | 54,712 | 6,384,639 | 92.4 |
| May | 6,763,286 | 51,699 | 6,804,935 | 96.4 |
| June | 6,495,050 | 48,735 | 6,543,878 | 94.7 |
| July | 6,329,393 | 61,166 | 6,390,559 | 89.8 |
| Aug. | 6,629,580 | 71,902 | 6,601,482 | 92.5 |
| Sept. | 6,653,578 | 49,788 | 6,703,366 | 97.3 |
| Oct. | 6,905,280 | 59,993 | 6,965,273 | 97.8 |
| Nov. | 6,636,649 | 62,341 | 6,698,990 | 97.0 |
| Dec. | 6,887,667 | 65,849 | 6,953,516 | 97.7 |
| Total | 77,114,073 | 868,758 | 77,800,831 | 92.7 |
| 1956 | | | | |
| Jan. | 6,985,945 | 63,619 | 7,049,564 | 97.1 |
| Feb. | 6,539,199 | 63,618 | 6,602,817 | 97.2 |
| Mar. | 7,083,877 | 65,566 | 7,149,443 | 98.5 |
| Apr. | 6,860,833 | 63,760 | 6,924,563 | 98.6 |
| May | 6,873,102 | 47,840 | 6,920,942 | 95.8 |
| June | 6,387,608 | 46,981 | 6,434,589 | 91.6 |
| July | 1,089,518 | 17,491 | 1,107,009 | 15.2 |
| Aug. | 5,100,669 | 41,548 | 5,142,217 | 70.8 |
| Sept. | 6,873,064 | 59,584 | 6,932,648 | 98.7 |

# Steel Castings Shipments

(Bureau of Census)

| | (Short Tons) Total | For Sale | For Own Use |
|---|---|---|---|
| 1950 | 1,461,667 | 929,192 | 374,217 |
| 1951 | 2,101,604 | 1,507,413 | 594,191 |
| 1952 | 1,925,116 | 1,476,352 | 448,767 |
| 1953 | 1,829,277 | 1,290,016 | 431,330 |
| 1954 | | | |
| Apr. | 105,788 | 78,754 | 27,034 |
| May | 94,610 | 70,596 | 24,014 |
| June | 100,022 | 72,881 | 27,141 |
| July | 75,848 | 53,207 | 22,641 |
| Aug. | 89,590 | 66,792 | 22,798 |
| Sept. | 88,359 | 64,722 | 23,637 |
| Oct. | 87,085 | 64,004 | 23,081 |
| Nov. | 87,659 | 64,812 | 22,847 |
| Dec. | 93,547 | 69,843 | 23,704 |
| Total | 1,184,096 | 880,158 | 303,938 |
| 1955 | | | |
| Jan. | 98,238 | 75,044 | 23,194 |
| Feb. | 106,430 | 80,729 | 25,701 |
| Mar. | 127,460 | 98,926 | 28,534 |
| Apr. | 120,053 | 92,237 | 27,816 |
| May | 122,465 | 92,713 | 29,752 |
| June | 133,887 | 102,457 | 31,430 |
| July | 97,875 | 71,170 | 26,705 |
| Aug. | 126,406 | 96,290 | 30,116 |
| Sept. | 140,843 | 107,622 | 33,221 |
| Oct. | 145,674 | 110,409 | 35,265 |
| Nov. | 152,381 | 116,908 | 35,473 |
| Dec. | 158,982 | 122,201 | 36,781 |
| Total | 1,530,694 | 1,166,706 | 363,988 |
| 1956 | | | |
| Jan. | 158,618 | 123,343 | 35,275 |
| Feb. | 165,398 | 128,598 | 36,800 |
| Mar. | 170,045 | 130,839 | 39,206 |
| Apr. | 163,708 | 125,015 | 38,693 |
| May | 178,227 | 142,025 | 36,202 |
| June | 164,661 | 129,147 | 35,514 |
| July | 117,984 | 96,350 | 21,634 |

## GALVANIZED SHEET SHIPMENTS

(American Iron & Steel Institute)

(Net Tons)

| | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. | 201,472 | 169,086 | 211,101 | 269,464 |
| Feb. | 183,503 | 167,433 | 199,408 | 272,997 |
| Mar. | 204,995 | 180,198 | 238,649 | 291,193 |
| Apr. | 196,656 | 203,312 | 239,001 | 266,728 |
| May | 189,765 | 201,671 | 235,962 | 272,741 |
| June | 184,862 | 200,456 | 246,940 | 279,058 |
| July | 185,896 | 214,349 | 205,211 | * |
| Aug. | 187,741 | 207,113 | 241,863 | 276,048 |
| Sept. | 194,257 | 209,765 | 269,020 | ..... |
| Oct. | 208,705 | 209,498 | 260,010 | ..... |
| Nov. | 177,891 | 195,190 | 255,692 | ..... |
| Dec. | 176,375 | 205,561 | 261,640 | ..... |
| Total | 2,290,868 | 2,362,632 | 2,864,497 | ..... |

* Combined with August figures

## SHIPMENTS of TIN-TERNE PLATE

(American Iron & Steel Institute)

(Net Tons)

| | Hot Dipped 1955 | Hot Dipped 1956 | Electrolytic 1955 | Electrolytic 1956 |
|---|---|---|---|---|
| Jan. | 82,874 | 81,034 | 335,682 | 402,627 |
| Feb. | 88,189 | 77,877 | 344,467 | 404,193 |
| Mar. | 94,434 | 133,257 | 419,574 | 598,129 |
| Apr. | 89,492 | 133,656 | 441,194 | 554,575 |
| May | 125,579 | 70,282 | 481,805 | 354,204 |
| June | 130,603 | 84,371 | 520,305 | 466,060 |
| July | 76,473 | * | 291,405 | * |
| Aug. | 111,482 | 81,005 | 441,201 | 408,903 |
| Sept. | 116,295 | ..... | 471,624 | ..... |
| Oct. | 60,355 | ..... | 249,790 | ..... |
| Nov. | 59,269 | ..... | 240,503 | ..... |
| Dec. | 65,363 | ..... | 263,087 | ..... |
| Total | 1,100,762 | ..... | 4,503,637 | ..... |

* Combined with August figures

# Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

| Week Beginning | 1953 | 1954 | 1955 | 1956 |
|---|---|---|---|---|
| Jan. 2 | 98.2 | 75.4 | 81.2 | 97.6 |
| Jan. 9 | 99.3 | 74.3 | 83.2 | 98.6 |
| Jan. 16 | 99.7 | 74.1 | 83.2 | 99.0 |
| Jan. 23 | 99.4 | 75.6 | 85.0 | 100.4 |
| Jan. 30 | 97.7 | 74.4 | 85.4 | 99.3 |
| Feb. 6 | 99.7 | 74,4 | 86.8 | 99.1 |
| Feb. 13 | 99.1 | 74.6 | 89.1 | 98.8 |
| Feb. 20 | 99.4 | 73.6 | 90.8 | 98.8 |
| Feb. 27 | 100.3 | 70.7 | 91.9 | 99.9 |
| Mar. 5 | 101.3 | 69.3 | 92.9 | 100.0 |
| Mar. 12 | 101.5 | 67.6 | 94.2 | 100.6 |
| Mar. 19 | 103.1 | 68.1 | 93.7 | 99.5 |
| Mar. 26 | 97.1 | 69.1 | 94.4 | 99.6 |
| Apr. 2 | 98.9 | 68.0 | 95.3 | 97.7 |
| Apr. 9 | 98.8 | 68.0 | 94.6 | 100.9 |
| Apr. 16 | 101.0 | 68.6 | 94.6 | 100.2 |
| Apr. 23 | 100.3 | 68.7 | 95.6 | 100.5 |
| Apr. 30 | 100.2 | 69.4 | 96.6 | 96.4 |
| May 7 | 100.3 | 70.9 | 97.2 | 95.2 |
| May 14 | 99.8 | 71.8 | 96.9 | 95.3 |
| May 21 | 100.3 | 71.2 | 96.4 | 97.3 |
| May 28 | 99.6 | 70.2 | 95.8 | 96.3 |
| June 4 | 97.9 | 73.2 | 94.7 | 96.7 |
| June 11 | 96.8 | 72.3 | 96.0 | 93.4 |
| June 18 | 96.8 | 72.1 | 95.0 | 93.0 |
| June 25 | 91.8 | 65.8 | 71.1 | 84.9 |
| July 2 | 92.8 | 60.0 | 85.9 | 12.3 |
| July 9 | 94.7 | 64.3 | 91.2 | 12.9 |
| July 16 | 94.4 | 65.3 | 91.0 | 14.6 |
| July 23 | 92.6 | 64.2 | 90.7 | 17.0 |
| July 30 | 94.0 | 64.0 | 86.9 | 16.9 |
| Aug. 6 | 95.2 | 64.0 | 89.4 | 57.5 |
| Aug. 13 | 95.9 | 61.8 | 90.2 | 87.5 |
| Aug. 20 | 93.4 | 63.5 | 90.6 | 95.8 |
| Aug. 27 | 90.5 | 64.0 | 93.4 | 97.0 |
| Sept. 3 | 89.2 | 63.0 | 93.8 | 98.7 |
| Sept. 10 | 91.4 | 66.3 | 95.7 | 100.6 |
| Sept. 17 | 95.1 | 68.7 | 96.1 | 100.6 |
| Sept. 24 | 95.3 | 70.4 | 97.0 | 101.3 |
| Oct. 1 | 95.2 | 71.0 | 96.7 | 101.8 |
| Oct. 8 | 96.3 | 72.8 | 96.5 | 100.9 |
| Oct. 15 | 95.0 | 73.6 | 98.9 | 101.7 |
| Oct. 22 | 94.6 | 74.5 | 100.0 | ... |
| Oct. 29 | 93.0 | 76.4 | 99.4 | ... |
| Nov. 5 | 92.3 | 77.2 | 99.6 | ... |
| Nov. 12 | 90.7 | 79.3 | 99.2 | ... |
| Nov. 19 | 86.8 | 80.3 | 100.1 | ... |
| Nov. 26 | 87.5 | 81.4 | 97.6 | ... |
| Dec. 3 | 86.7 | 82.5 | 100.1 | ... |
| Dec. 10 | 84.3 | 81.5 | 100.3 | ... |
| Dec. 17 | 64.1 | 72.4 | 96.9 | ... |
| Dec. 24 | 75.7 | 77.6 | 95.7 | ... |
| Dec. 31 | ... | ... | ... | ... |

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NICKEL PLATERS – RACKS AND BASKETS
CLEAN AND OFF-GRADES OF MONEL METAL

# I. Schumann & Company

4391 Bradley Road
P. O. Box 2219 — SHadyside 1-7800
Cleveland 9, Ohio

# copper

Electrolytic NEC* COC*

# zinc

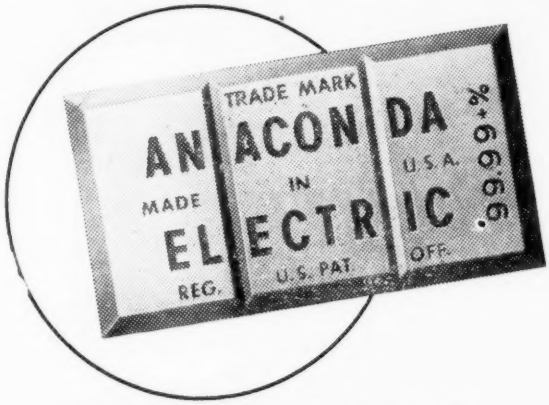
99.99 + % Electric*
High Grade Electrolytic

# lead

Common Desilverized ILR*

# aluminum

Pig • Ingot




**NODULIZED MANGANESE ORE**

**FERROMANGANESE** STANDARD GRADE

**CADMIUM • SILVER • BISMUTH • INDIUM**

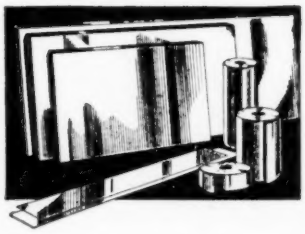
Arsenic • Palladium • Platinum • Selenium • Tellurium

ANACONDA
from mine to consumer

## Anaconda Sales Company

**25 Broadway, New York 4, New York**
Subsidiary of The Anaconda Company

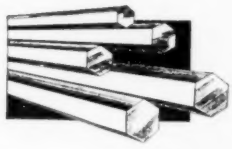
*Reg. U. S. Pat. Off.



# ANACONDA COPPER • BRASS • BRONZE Sheet,

**Strip, Rod, Wire, Copper Tubes and Fittings, 85 Red Brass Pipe, Free-Cutting Rods**

made by THE AMERICAN BRASS COMPANY, Waterbury 20, Conn. • Subsidiary of The Anaconda Company



## DISTRICT SALES OFFICES

Ansonia, Conn.
Atlanta 3, Ga.
Buffalo 5, N. Y.
Cambridge 42, Mass.
Cedar Rapids, Iowa
Charlotte 2, N. C.
*Chicago 39, Ill.
Cincinnati 2, Ohio
*Cleveland 14, Ohio
Columbus 15, Ohio
*Dallas 25, Texas
Denver 2, Colo.
Detroit 31, Mich.
Houston 2, Texas
Kenosha, Wis.
Los Angeles 17, Calif.
Miami 30, Fla.
*Milwaukee 4, Wis.
Minneapolis 2, Minn.
Newark 2, N. J.
New York 16, N. Y.
*Philadelphia 22, Pa.
Pittsburgh 19, Pa.
*Providence 3, R. I.
Rochester 4, N. Y.
St. Louis 3, Mo.
San Francisco 4, Calif.
Seattle 1, Wash.
Syracuse 2, N. Y.
Torrington, Conn.
Washington 5, D. C.
Waterbury 20, Conn.
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Waterbury 20, Conn.
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New Toronto, Ontario
*Montreal Office:*
909 Dominion Square Building
*Warehouses

55141